Shepparton North East

Development Contributions Plan

February 2019

GREATER SHEPPARTON

Victorian Planning Authority

VICTORIA State Government

Contents

PLANS

TABLES

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Table 1 provides an overview of the project categories and charges included within this development contributions plan (DCP). A more detailed explanation of apportionment, methods of calculation, and the description and costs of individual projects is included within the document.

Table 1 Summary of charges

SUMMARY – NET DEVELOPABLE AREA (NDA)		
CHARGE AREA	TOTAL COST OF CONTRIBUTION	CONTRIBUTION PER NET DEVELOPABLE HECTARE (NDHA)
Residential	**$21,393,038**	**$146,793**

SUMMARY – DEVELOPMENT INFRASTRUCTURE LEVY		
PROJECTS	TOTAL COST OF PROJECTS	CONTRIBUTION PER NET DEVELOPABLE HECTARE (NDHA)
Transport	$4,102,039	$28,147
Community facilities	$2,829,000	$19,411
Open space	$5,723,000	$39,270
Drainage	$8,481,791	$58,200
Strategic planning	$257,208	$1,765
Total	**$21,393,038**	**$146,793**

Plan 1 - Local Context

Shepparton North East Development Contributions Plan

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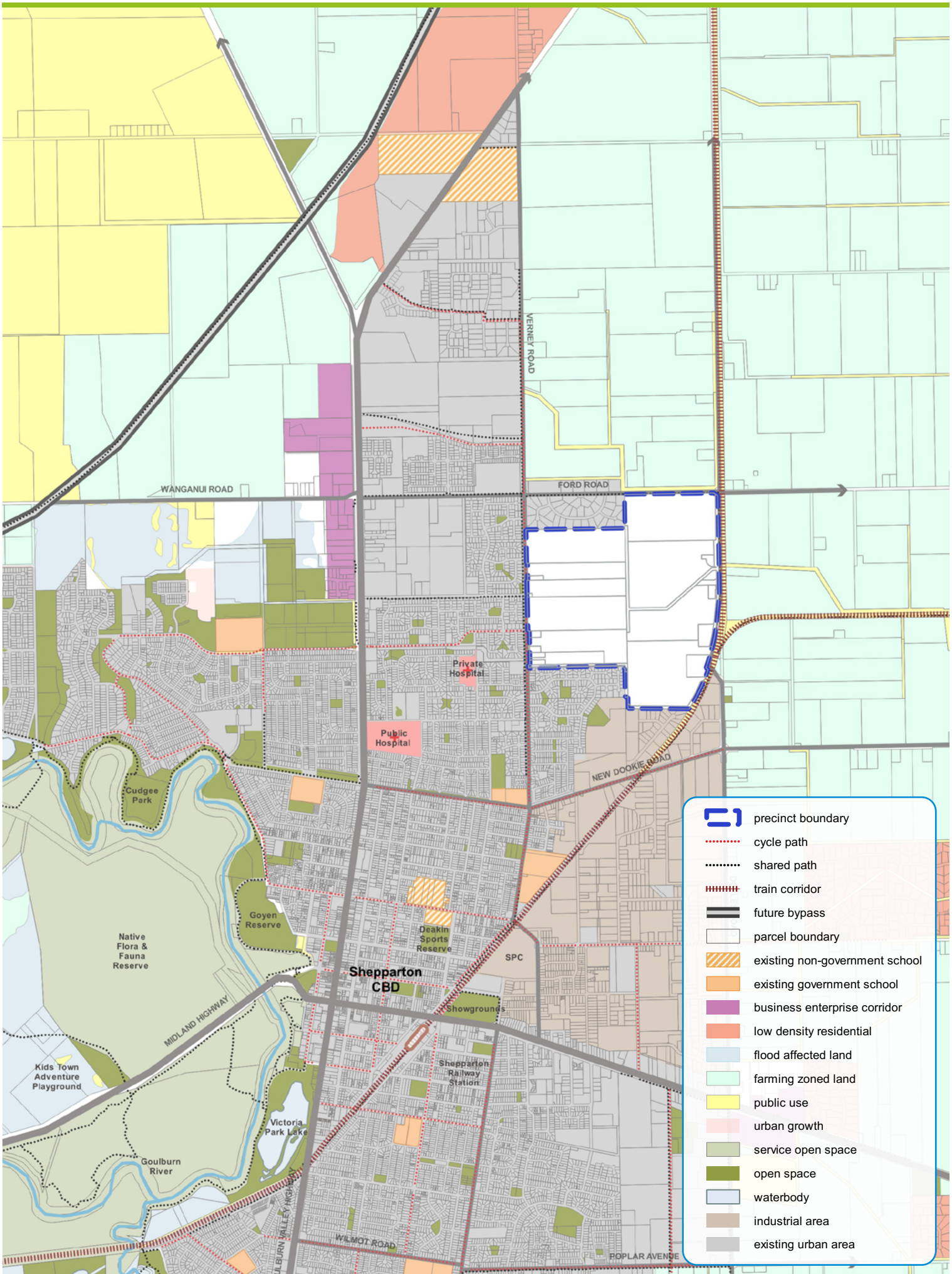


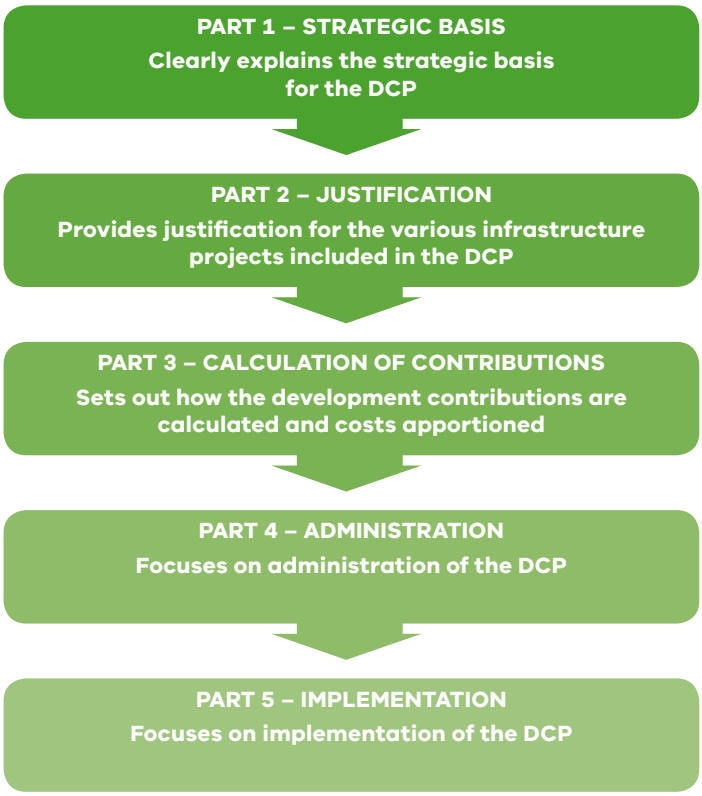
1.0 INTRODUCTION

The Shepparton North East Development Contributions Plan (DCP) has been prepared by the Victorian Planning Authority (VPA) in partnership with Greater Shepparton City Council (council) and with the assistance of government agencies, service authorities and major stakeholders.

The DCP:

- Outlines projects required to ensure that future residents, visitors and workers in the precinct can be provided with timely access to infrastructure and services necessary to support a quality and affordable lifestyle
- Establishes a framework for development proponents to make a financial contribution towards the cost of identified infrastructure projects
- Ensures the cost of providing new infrastructure and services is shared equitably between various development proponents and the wider community
- Provides the details of the calculation of financial contributions that must be made by future developments towards the nominated projects
- Provides developers, investors and the local community with certainty about development contribution requirements and how these will be administered.

The DCP document comprises five parts:



The strategic basis for the DCP is informed by:

- State and Local Planning Policy Framework as set out in the Greater Shepparton Planning Scheme
- *Precinct Structure Planning Guidelines* (Growth Areas Authority, 2008)
- *Infrastructure Design Manual* (Local Government Infrastructure Design Association)
- *Shepparton North East Precinct Structure Plan* and supporting documents.

These documents set out a broad, long term vision for the sustainable development of the precinct and its surrounds.

Plan 2 - Future Urban Structure

Shepparton North East Development Contributions Plan

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1.1 *Planning and Environment Act 1987*

The DCP has been prepared in accordance with Part 3B of the *Planning and Environment Act 1987* (*the Act*) as well as other relevant legislation and has been developed in line with the State and Local Planning Policy Framework of the Greater Shepparton Planning Scheme. It is consistent with the Ministerial Direction on development contributions plans made under section 46M(1) of *the Act* and has had regard to the Victorian Government's *Development Contributions Plan Guidelines*.

The DCP provides for the charging of a development infrastructure levy (DIL) pursuant to section 46J(a) of *the Act* towards works, services and facilities.

The DCP forms part of the Greater Shepparton Planning Scheme pursuant to section 46I of *the Act* and is an incorporated document under the Schedule to Clause 72.04 of the Greater Shepparton Planning Scheme. The DCP is implemented in the Greater Shepparton Planning Scheme through Schedule 4 to the Development Contributions Plan Overlay (DCPO4) that applies to the 'main catchment area' illustrated on Plan 2.

1.2 Shepparton North East Precinct Structure Plan

Shepparton has been experiencing and planning for urban growth for many years. The *Greater Shepparton 2030 Strategy* (2006) describes the long-term population growth forecasts and sets a strategic direction for where new houses for this increased population will be most appropriately delivered; this direction was reviewed and further refined through the preparation of the Shepparton North East Precinct Structure Plan (PSP).

The PSP identifies approximately 177 hectares of land for urban development as illustrated on Plan 2. The PSP sets out the vision for how land should be developed, describes the objectives to be achieved by the future development and outlines projects required to support the future community. The need for the infrastructure set out in the DCP has been determined according to the anticipated development scenario as described in the PSP.

The DCP has a strong relationship to the PSP, as the PSP provides the rationale and justification for infrastructure items that have been included within the DCP. Accordingly, the DCP is an implementation-based planning tool which identifies the infrastructure items required by the new community and apportions the cost of this infrastructure in an equitable manner across the plan area.

The PSP has been developed following a comprehensive planning process which establishes the future direction of development within the precinct.

1.3 The area to which the development contributions plan applies

In accordance with section 46K(1)(a) of *the Act*, the DCP applies to land illustrated on Plan 2; this area is known as the main catchment area (MCA). The area is identified as DCPO4 in the Greater Shepparton Planning Scheme.

In identifying infrastructure items for delivery, consideration has been given to ensure they are not already wholly funded through another contribution mechanism, such as a mandatory infrastructure construction requirements, an existing local DCP, an agreement under Section 173 of *the Act*, or as a condition on an existing planning permit.

1.4 Infrastructure items included in the development contributions plan

The need for infrastructure included in the DCP has been determined on the basis of the development scenario as described in the PSP and its supporting documents.

Items can be included in a DCP if the proposed development of an area is likely to create the need for infrastructure by its future community. New development does not have to trigger the need for new items in its own right. Furthermore, an item can be included in a DCP regardless of whether it is within or outside the DCP area.

Before inclusion in the DCP, all items have been assessed to ensure they have a relationship or nexus to proposed development in the PSP. The cost apportionment methodology adopted in the DCP relies on the nexus principle. A new development is deemed to have a nexus with an item if it is expected to make use of that item.

The items that have been included in the DCP all have the following characteristics, namely that they:

- Are essential to the health, safety and wellbeing of the community
- Will be used by a broad cross-section of the community
- Reflect the vision and strategic aspirations expressed in the PSP
- Are not recurrent items
- Are the basis for the future development of an integrated network.

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1.5 Items not included in the development contributions plan (developer works)

The following items are not included in the DCP, they must be provided by developers as a matter of course and/or pursuant to agreements with servicing agencies in implementing the PSP:

- Connector streets and local streets, except those included in the DCP
- Intersection works and traffic management measures along arterial roads, connector streets and local streets (except those included in the DCP)
- Local bus stop infrastructure (where locations have been agreed in writing by Public Transport Victoria)
- Landscaping of all existing and future roads and local streets
- Local shared, pedestrian and bicycle paths along local streets, connector streets, utilities easements, waterways and within local parks including bridges, intersections, and barrier crossing points (except those included in the DCP)
- Council approved fencing and landscaping along arterial roads, the railway corridor and shared paths, as required
- Bicycle parking
- Appropriately scaled lighting along all roads, major shared and pedestrian paths, and traversing the open space network
- Local street or path crossings of waterways, unless included in the DCP or outlined as the responsibility of an agency in the PSP
- Infrastructure as required by utility services providers, including water, sewerage, electricity, gas and telecommunications.

The items listed above are considered to be normal to the construction of a development and are not considered to warrant cost sharing arrangements beyond those set out in the DCP.

They may be further addressed and defined by an agreement under Section 173 of *the Act* and/or conditions in planning permits.

Upgrade of the existing adjoining road network to an urban standard will be implemented through subdivision permit conditions to the satisfaction of the responsible authority, except where specified as a DCP project.

1.6 Related infrastructure agreements

A number of additional infrastructure agreements may relate to the precinct area. These include the Greater Shepparton City Council Development Contributions Plan Levy, associated Section 173 agreements of *the Act* that have been entered into and relevant capital works programs.

Plan 3 - Transport Projects

Shepparton North East Development Contributions Plan

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2.0 INFRASTRUCTURE PROJECT JUSTIFICATION

2.1 Project identification

The DCP uses a project identification system of project category and sequential number in its tables and plans.

The following types of projects are included in the DCP:

- **Transport projects**
  - RD – Roads
  - IN – Intersections
  - BR – Bridges & culverts
- **Community facility projects**
  - CI – Community facilities
- **Open space projects**
  - OS – Open space
- **Drainage projects**
  - RB – Retarding basins & piped drains

2.1.1 Transport projects

The PSP outlines an expanded urban structure intended to support the future residential growth of the precinct, including connector streets, and local streets on a grid adjusted to meet the existing constraints of the area. Where the precinct requires a new or upgraded intersection with the existing road network, the costs associated with that intersection have been included in the DCP.

Typically, arterial road widening and carriageway upgrades or construction are included in a DCP, however a traffic impact assessment report (Traffic Works Pty Ltd, September 2014) undertaken as part of the preparation of the PSP indicates that additional capacity is not required on the arterial road network and upgrade projects have not been included in the DCP.

While the delivery of the connector street network would typically be considered developer works (and not funded via a DCP), the DCP will fund the land and construction costs to upgrade an 150 metre length of Connector Level 1 to Connector Level 2 street to ensure the connector street network can be efficiently and equitably delivered. The fragmented nature of land parcels in the precinct means that without the DCP delivering a portion of the connector street network the cost of infrastructure delivery would be inequitably borne by some developers.

The DCP will make funds available for the construction of a pedestrian bridge for a shared path crossing over Goulburn–Murray Water (GMW) Drain 3 on the east side of Verney Road. The path extension is required to connect the new residential area to the existing shared path network.

The transport projects include:

- Construction of controlled intersections with the existing road network bordering the precinct and associated works including bridge or culvert works across waterways
- Connections between the new development and the existing shared-path network
- Road construction listed in the DCP and consistent with the relevant cross-sections outlined in the PSP.

These projects are shown in Plan 3 and described in Table 2.

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Table 2 Transport projects

DCP PROJECT ID	PROJECT TITLE & DESCRIPTION	INDICATIVE PROVISION TRIGGER
ROADS		
RD-01	**Ryeland Drive: Connector Street Level 2** Land and construction costs for the upgrade of a Connector Street Level 1 (24 metre) to a Connector Street Level 2 (30 metre) (ultimate standard).	As required by traffic/access demand.
RD-02	**Pine Road: Connector Street Level 2** Land and construction costs for the upgrade of a Connector Street Level 1 (24 metre) to a Connector Street Level 2 (30 metre) (ultimate standard).	As required by traffic/access demand.
RD-03	**Ford Road and Grahamvale Road: Connector Street Level 2** Land and construction costs for the upgrade of a Connector Street Level 1 (24 metre) to a Connector Street Level 2 (30 metre) (ultimate standard).	As required by traffic/access demand.
BRIDGE		
BR-01	**Shared path bridge** Construction of a shared path bridge over GMW Drain 3 at Verney Road (east side) adjacent to the precinct boundary (ultimate standard).	As required by traffic/access demand.
INTERSECTIONS		
IN-01	**Ryeland Drive and Verney Road** Purchase of land for intersection and construction of 4-way signalised intersection (ultimate standard).	As required by traffic/access demand.
IN-02	**Pine Road and Verney Road** Purchase of land for intersection and construction of 4-way signalised intersection (ultimate standard).	As required by traffic/access demand.
IN-03	**Ford Road and Grahamvale Road** Construction of the connection to the roundabout, the crossing structure over the GMW irrigation channel and the left turning lane (ultimate standard).	As required by traffic/access demand.

Plan 4 - Community & Open Space

Shepparton North East Development Contributions Plan

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2.1.2 Community facility projects

The community facility project is based on the *Social Infrastructure Assessment Review* (Greater Shepparton City Council, 2012).

The community facility project is:

- Land and construction of a Level 1 community centre incorporating a community room and space for a double kindergarten.

The detailed design and scope of the community facility project will be reviewed by council closer to the time of construction. In reviewing the scope of the facility, council will have regard to matters such as changing provision standards and models, the immediate needs of the community, current regulations and best practice, and may adjust and refine the scope of the facility to respond to these matters.

In adjusting and refining any final project scope council will ensure that at least the same total cost of the project item (as indexed from time to time) is invested into the community facility project proposed.

The DCP will contribute 50% to the land and construction cost of the community facility, with the remainder of the cost covered by council. The community facility project funded by the DCP is shown on Plan 4 and described in Table 3.

Table 3 Community facility projects

DCP PROJECT ID	PROJECT TITLE & DESCRIPTION	INDICATIVE PROVISION TRIGGER
CI-01	**Shepparton North East community centre** Purchase of land for a multi-purpose community centre (level 1) located on Verney Road.	Land purchase to occur upon subdivision.
CI-01c	**Shepparton North East community centre** Construction of a multi-purpose community centre (level 1) located on Verney Road.	Facility to be constructed when population growth creates the need.

2.1.3 Open space projects

The open space projects are based on the *Shepparton North East Growth Corridor PSP Open Space Review* (@Leisure Planners Pty Ltd, 2012).

The open space projects include:

- Land and embellishment of open space for one district park
- Land and embellishment of open space for three local parks.

The open space projects funded by the DCP are shown on Plan 4 and described in Table 4.

Table 4 Open space facilities

DCP PROJECT ID	PROJECT TITLE & DESCRIPTION	AREA (HA)	INDICATIVE PROVISION TRIGGER
OS-01	**North-west district park adjoining RB-01** Purchase of land and construction of park (ultimate standard).	2.22	Facility to be constructed when population growth creates the need.
OS-02	**South-west local park adjoining RB-02** Purchase of land and construction of park (ultimate standard).	0.70	Facility to be constructed when population growth creates the need.
OS-03	**North-east local park adjoining RB-03** Purchase of land and construction of park (ultimate standard).	0.70	Facility to be constructed when population growth creates the need.
OS-04	**South-east local park adjoining RB-04** Purchase of land and construction of park (ultimate standard).	0.70	Facility to be constructed when population growth creates the need.

Plan 5 - Integrated Water Management & Utilities

Shepparton North East Development Contributions Plan

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2.1.4 Drainage projects

The DCP makes funding available for the construction of all necessary drainage infrastructure. The DCP only makes an allowance for the acquisition of land for drainage infrastructure where the land required would be otherwise unencumbered. Waterway corridors identified in the DCP are encumbered land and represent the minimum width when a suitable frontage road is provided.

The drainage infrastructure has been identified through hydraulic modelling undertaken as part of a *Drainage Strategy Peer Review* (Spiire Australia Pty Ltd, 2018).

The drainage infrastructure is required to appropriately retard and treat stormwater flows from new urban development, in accordance with best practice principles and prior to discharge into rural areas at pre-development rates to the satisfaction of GMW.

The drainage projects include:

- Land for and construction of retarding basins and wetlands
- Channel works
- A legal point of discharge for each parcel within the precinct
- Piped drains.

Table 5 Drainage projects

DCP PROJECT ID	PROJECT TITLE & DESCRIPTION	AREA (HA)	INDICATIVE PROVISION TRIGGER
RB-01	**North-west retardation basin adjoining OS-01** Purchase of land and construction of retardation basin and construction of piped drains connecting retarding basin to discharge point at Drain 3 (ultimate standard).	2.03	To be constructed when population growth creates the need.
RB-02	**South-west retardation basin adjoining OS-02** Purchase of land and construction of retardation basin and construction of piped drains connecting retarding basin to discharge point at Drain 3 (ultimate standard).	2.05	To be constructed when population growth creates the need.
RB-03	**North-east retardation basin adjoining OS-03** Purchase of land and construction of retardation basin and construction of piped drains connecting retarding basin to discharge point at Drain 3 (ultimate standard).	2.55	To be constructed when population growth creates the need.
RB-04	**South-east retardation basin adjoining OS-04** Purchase of land and construction of retardation basin and construction of piped drains connecting retarding basin to discharge point at Drain 3 (ultimate standard).	2.49	To be constructed when population growth creates the need.

2.2 Project timing

Each item in the DCP has an assumed indicative provision trigger specified in Tables 2–5. The timing of the provision and the items in the DCP are consistent with information available at the time the DCP was prepared.

Greater Shepparton City Council is the development agency as well as the collecting agency, and will monitor and assess the required timing for individual items and have regard to its capital works program.

The collecting agency may consider alternatives to the priority delivery of works or land where:

- Infrastructure is to be constructed / provided by development proponents as works or land in kind, as agreed by the collecting agency
- Network priorities require the delivery of works or land to facilitate broader road network connections
- Community needs determine the delivery of works or land for community facilities, sports reserves and open space.

All items in the DCP will be provided as soon as is practicable and as soon as sufficient contributions are available, consistent with Section 4.1 and acknowledging the development agency's capacities to provide the balance of funds not recovered by the DCP.

Contributions are to be made by developers at the time of subdivision. If subdivision is not applicable payments must be made prior to construction of buildings and works (refer to Section 4.1).

Table 6 Summary land use budget

DESCRIPTION	SHEPPARTON NORTH EAST DCP		
	HECTARES	% OF TOTAL	% OF NDA
TOTAL PRECINCT AREA (HA)	176.87		
TRANSPORT			
Non-arterial road widening and intersection flaring (DCP land)	0.79	0.45%	0.54%
Sub-total transport	**0.79**	**0.45%**	**0.54%**
COMMUNITY & EDUCATION			
Government school – existing & potential expansion	3.56	2.01%	2.44%
Non-government school – existing & potential expansion	5.35	3.03%	3.67%
Local community facility (DCP land)	0.40	0.23%	0.28%
Sub-total community & education	**9.31**	**5.26%**	**6.39%**
OPEN SPACE			
DRAINAGE RESERVE			
Waterway & drainage reserve	6.19	3.50%	4.25%
Waterway & drainage reserve (DCP land)	9.12	5.16%	6.26%
Sub-total drainage reserve	**15.31**	**8.66%**	**10.51%**
PARKS			
District/local park (DCP land)	4.32	2.44%	2.97%
Sub-total parks	**4.32**	**2.44%**	**2.97%**
TOTAL ALL OPEN SPACE	19.63	11.10%	13.48%
OTHER			
Proposed land for roundabout	1.40	0.79%	0.96%
Sub-total other	**1.40**	**0.79%**	**0.96%**
TOTAL NET DEVELOPABLE AREA – (NDA) HA	145.74	82.40%	

NOTE: The summary land budget included in this table clearly sets out the NDA for the PSP. The NDA will not be amended to respond to minor changes to land budgets that may result from the subdivision process for any other reason than those stated above, unless the variation is agreed to by the responsible authority.

The land budget has been prepared to reflect current advice from council regarding land required for drainage assets as part of the preparation of the drainage scheme for the PSP area. The land required for drainage assets may be subject to minor refinement through the subdivision process.

3.0 CALCULATION OF CONTRIBUTIONS

3.1 Calculation of net developable area and demand units

The following section sets out how the net developable area (NDA) is calculated and outlines the development projections anticipated in the precinct.

3.1.1 Net developable area

In the DCP, all development infrastructure contributions are payable on the net developable area of land on any given development site. Calculations of NDA for each individual property is outlined in the property-specific land budget included at Appendix A.

For the purposes of the DCP the NDA is defined as the total amount of land within the precinct that is made available for development. It is the total precinct area minus community facilities, educational facilities, open space and encumbered land. NDA includes any land for lots, housing and employment buildings, all local streets (including some connector streets), and any small parks defined at subdivision stage that are in addition to those outlined in the PSP.

The NDA for the DCP is outlined in Table 6. The contributions 'per net developable hectare' must not and will not be amended to respond to minor changes to the land budget that may result from the subdivision process. In other words, the DCP is permanently linked to the calculation of the NDA set out in Appendix A.

The NDA may only change if the collecting agency agrees to a variation to the summary land use budget (Table 6) and the detailed property-specific land budget (Appendix A) and associated tables.

3.1.2 Land budget & demand units

The 'net developable hectare' is the demand unit for the DCP.

'Residential' development is defined broadly to include forms of development that support a residential land use, including residential subdivision and development within the local convenience centre.

'Residential' development also includes any non-residential uses within the residential area such as a place of worship, education centre, retirement village, nursing home, child care centre, medical centre, convenience store or any other approved use.

The DCP contains a total of 145.74 net developable hectares.

3.2 Calculation of contributions charges

3.2.1 Calculation of costs

Each infrastructure project has been assigned a land and/or construction cost, as listed in Table 7. The costs are expressed in 2018 dollars and will be adjusted annually in accordance with the method specified in Section 4.3.

Road, intersection and bridge construction costs have been determined by Civil Design Consulting Engineers Pty Ltd (refer to Appendix B for road cost sheets).

Community facility costs have been determined by Plancost Pty Ltd (refer to Appendix B for community facilities cost sheets).

Open space project costs have been determined by Plancost Pty Ltd (refer to Appendix B for open space cost sheets).

Drainage Basin 1 and piped drain costs have been determined by Spiire Australia Pty Ltd (refer to Appendix B for drainage and water treatment cost sheets). These costs were used on a pro rata basis to calculate the cost for the other three basins and piped drains connecting with discharge points at drain No. 3.

3.2.2 Estimate of land value

The area of land to be acquired for each DCP project on each property was identified from the property specific land budget prepared for the PSP. A description of the precinct land area was provided to a registered valuer who then prepared a valuation to determine a 'broad-hectare' value for the entire precinct. To ensure a fair compensation for each affected land owner this value has then been used to calculate the cost of the land component for all relevant projects included in the DCP.

3.2.3 DCP & PSP preparation

In addition to the items described above, the costs incurred by council in preparing the DCP and PSP have also been included as a project. Costs incurred include fees for the preparation of concept designs and cost estimates.

3.2.4 Main catchment area

The main catchment area is the geographic area from which a given item of infrastructure will draw most of its use.

The DCP includes one main catchment area, which is the same as the precinct area and illustrated in Plan 2.

It is important to note that the number of net developable hectares (that is the demand units) in the main catchment area is based on the land budgets in Table 6 and Appendix A.

3.2.5 Non-government schools

The development of land for a non-government school is exempt from the requirement to pay a development infrastructure levy and a community infrastructure levy under the DCP.

Table 7 Calculation of costs – development infrastructure levy (DIL)

DCP PROJECT ID	PROJECT	INFRASTRUCTURE CATEGORY	LAND AREA (HA)	ESTIMATED PROJECT COST: LAND	ESTIMATED PROJECT COST: CONSTRUCTION	TOTAL ESTIMATED PROJECT COST: LAND & CONSTRUCTION	% APPORTIONED TO DCP	TOTAL COST RECOVERED BY DCP	RESIDENTIAL – CONTRIBUTION PER NDHA
TRANSPORT PROJECTS									
ROAD PROJECTS									
RD-01	**Ryeland Drive: Connector Street Level 2** Land and construction costs for the upgrade of a Connector Street Level 1 (24 metre) to a Connector Street Level 2 (30 metre) (ultimate standard).	Development	0.10	$27,500	$42,957	$70,457	100%	$70,457	$483
RD-02	**Pine Road: Connector Street Level 2** Land and construction costs for the upgrade of a Connector Street Level 1 (24 metre) to a Connector Street Level 2 (30 metre) (ultimate standard).	Development	0.09	$24,750	$42,957	$67,707	100%	$67,707	$465
RD-03	**Ford Road and Grahamvale Road: Connector Street Level 2** Land and construction costs for the upgrade of a Connector Street Level 1 (24 metre) to a Connector Street Level 2 (30 metre) (ultimate standard).	Development	0.09	$24,750	$42,957	$67,707	100%	$67,707	$465
SUB-TOTAL ROAD PROJECTS			0.28	$77,000	$128,871	$205,871		$205,871	$1,413
INTERSECTION PROJECTS									
IN-01	**Ryeland Drive and Verney Road** Purchase of land for intersection and construction of 4-way signalised intersection (ultimate standard).	Development	0.24	$66,000	$1,130,964	$1,196,964	100%	$1,196,964	$8,213
IN-02	**Pine Road and Verney Road** Purchase of land for intersection and construction of 4-way signalised intersection (ultimate standard).	Development	0.28	$77,000	$1,144,553	$1,221,553	100%	$1,221,553	$8,382
IN-03	**Ford Road and Grahamvale Road** Construction of the connection to the roundabout, the crossing structure over the GMW irrigation channel and the left turning lane.	Development	0.00	$–	$1,365,953	$1,365,953	100%	$1,365,953	$9,373
SUB-TOTAL INTERSECTION PROJECTS			0.52	$143,000	$3,641,470	$3,784,470		$3,784,470	$25,968

DCP PROJECT ID	PROJECT	INFRASTRUCTURE CATEGORY	LAND AREA (HA)	ESTIMATED PROJECT COST: LAND	ESTIMATED PROJECT COST: CONSTRUCTION	TOTAL ESTIMATED PROJECT COST: LAND & CONSTRUCTION	% APPORTIONED TO DCP	TOTAL COST RECOVERED BY DCP	RESIDENTIAL – CONTRIBUTION PER NDHA
BRIDGE PROJECTS									
BR-01	**Shared path bridge** Construction of a shared path bridge over GMW Drain 3 at Verney Road (east side) outside of PSP boundary (ultimate standard).	Development	0.00	$–	$111,698	$111,698	100%	$111,698	$766
SUB-TOTAL BRIDGE PROJECTS			0.00	$–	$111,698	$111,698		$111,698	$766
TOTAL TRANSPORT			**0.79**	**$220,000**	**$3,882,039**	**$4,102,039**		**$4,102,039**	**$28,147**
COMMUNITY FACILITIES									
CI-01	**Shepparton North East Community Centre** Purchase of land for a multi-purpose community centre (level 1) located on Verney Road.	Development	0.40	$400,000	$–	$400,000	50%	$200,000	$1,372
CI-01c	**Shepparton North East Community Centre** Construction of a multi-purpose community centre (level 1) located on Verney Road.	Development	0.00	$–	$5,258,000	$5,258,000	50%	$2,629,000	$18,039
TOTAL COMMUNITY FACILITIES			**0.40**	**$400,000**	**$5,258,000**	**$5,658,000**		**$2,829,000**	**$19,411**
DRAINAGE PROJECTS									
RB-01	**North-west retarding basin adjoining OS-01** Purchase of land and construction of retarding basin and construction of piped drains connecting retarding basin to discharge point at Drain 3 (ultimate standard).	Development	2.03	$558,250	$1,476,371	$2,034,621	100%	$2,034,621	$13,961
RB-02	**South-west retarding basin adjoining OS-02** Purchase of land and construction of retarding basin and construction of piped drains connecting retarding basin to discharge point at Drain 3 (ultimate standard).	Development	2.05	$563,750	$1,449,871	$2,013,621	100%	$2,013,621	$13,817
RB-03	**North-east retarding basin adjoining OS-03** Purchase of land and construction of retarding basin and construction of piped drains connecting retarding basin to discharge point at Drain 3 (ultimate standard).	Development	2.55	$701,250	$1,629,880	$2,331,130	100%	$2,331,130	$15,996
RB-04	**South-east retarding basin adjoining OS-04** Purchase of land and construction of retarding basin and construction of piped drains connecting retarding basin to discharge point at Drain 3 (ultimate standard).	Development	2.49	$684,750	$1,417,669	$2,102,419	100%	$2,102,419	$14,426
TOTAL DRAINAGE PROJECTS			**9.12**	**$2,508,000**	**$5,973,791**	**$8,481,791**		**$8,481,791**	**$58,200**

DCP PROJECT ID	PROJECT	INFRASTRUCTURE CATEGORY	LAND AREA (HA)	ESTIMATED PROJECT COST: LAND	ESTIMATED PROJECT COST: CONSTRUCTION	TOTAL ESTIMATED PROJECT COST: LAND & CONSTRUCTION	% APPORTIONED TO DCP	TOTAL COST RECOVERED BY DCP	RESIDENTIAL – CONTRIBUTION PER NDHA
OPEN SPACE PROJECTS									
OS-01	**North-west district park adjoining RB-01** Purchase of land and construction of park (ultimate standard).	Development	2.22	$610,500	$2,615,000	$3,225,500	100%	$3,225,500	$22,132
OS-02	**South-west local park adjoining RB-02** Purchase of land and construction of park (ultimate standard).	Development	0.70	$192,500	$640,000	$832,500	100%	$832,500	$5,712
OS-03	**North-east local park adjoining RB-03** Purchase of land and construction of park (ultimate standard).	Development	0.70	$192,500	$640,000	$832,500	100%	$832,500	$5,712
OS-04	**South-east local park adjoining RB-04** Purchase of land and construction of park (ultimate standard).	Development	0.70	$192,500	$640,000	$832,500	100%	$832,500	$5,712
TOTAL OPEN SPACE PROJECTS			**4.32**	**$1,188,000**	**$4,535,000**	**$5,723,000**		**$5,723,000**	**$39,270**
PSP & DCP PREPARATION FEES									
PL-01	Preparation of precinct structure plan and development contributions plan							$257,208	$1,765
TOTAL PSP & DCP PREPARATION FEES								**$257,208**	**$1,765**
SUMMARY									
TOTAL COST ALL PROJECTS								**$21,393,038**	**$146,793**

4.0 ADMINISTRATION

This section sets out how the DCP will be administered and covers the timing of payment, provision of works and land in kind and how funds generated by the DCP will be managed in terms of reporting, indexation and review periods.

The development infrastructure levy applies to subdivision and/or development of land.

Greater Shepparton City Council will be both the collecting agency and the development agency for the purposes of the DCP.

4.1 Payment of contributions and payment timing

4.1.1 Development infrastructure levy (DIL)

For subdivision of land

A development infrastructure levy must be paid to the collecting agency for the land within the following specified time, namely after certification of the relevant plan of subdivision but not more than 21 days prior to the issue of a Statement of Compliance in respect of that plan or included in an implementation agreement under Section 173 of *the Act*.

Where the subdivision is to be developed in stages, the infrastructure levy for the stage to be developed only may be paid to the collecting agency within 21 days prior to the issue of a Statement of Compliance in respect of that stage provided that a Schedule of Development Contributions is submitted with each stage of the plan of subdivision. This schedule must show the amount of the development contributions payable for each stage and value of the contributions in respect of prior stages to the satisfaction of the collecting agency or included in an implementation agreement under section 173 of *the Act*.

If the collecting agency agrees to works and/or provision of land in lieu of the payment of the infrastructure levy, the landowner must enter into an agreement under Section 173 of *the Act* in respect of the proposed works and/or provision of land in kind to specific requirements.

For development of land where no subdivision is proposed

Provided an infrastructure levy has not already been paid on subject land, an infrastructure levy must be paid to the collecting agency in accordance with the provisions of the approved DCP for each demand unit (net developable hectare) proposed to be developed prior to the commencement of any development (i.e. development includes buildings, car park, access ways, landscaping and ancillary components). The collecting agency may require that development infrastructure levy contributions be made at either the planning permit or building permit stage.

If the collecting agency agrees to works and/or provision of land in lieu of the payment of the infrastructure levy, the landowner must enter into an agreement under Section 173 of *the Act* or other arrangement acceptable to the collecting agency proposed in respect of the proposed works and/or land to be provided in kind.

Where no planning permit is required

The following requirement applies where no planning permit is required. The land may only be used and developed subject to the following requirements being met:

- Unless some other arrangement has been agreed to by the collecting agency in a Section 173 agreement, prior to the commencement of any development, a development infrastructure levy must be paid to the collecting agency in accordance with the provisions of the DCP for the land.

If the collecting agency agrees to works and/or provision of land in lieu of the payment of the infrastructure levy, the landowner must enter into an agreement under Section 173 of *the Act* in respect of the proposed works or provision of land which is proposed to be provided in kind.

4.1.2 Works-in-kind

The collecting agency may permit development proponents to undertake works in lieu of cash payments, providing that:

- The works constitute projects funded by the DCP
- The collecting agency agrees that the timing of the works would be consistent with priorities in the DCP
- The development proponent complies with appropriate tendering, documentation, supervision and related provisions as required by the responsible authority
- Works must be provided to a standard that generally accords with the DCP, unless an alternative is agreed by the collecting agency and the development agency
- Detailed design must be approved by the collecting agency and the development agency and must generally accord with the standards outlined in the DCP unless an alternative is agreed by the collecting agency and the development agency
- The construction of works must be completed to the satisfaction of the collecting agency and the development agency
- There should be no negative financial impact on the DCP to the satisfaction of the collecting agency.

In particular, the works will only be accepted in lieu of a financial contribution required by the DCP to the extent that they constitute part or all of the design of the infrastructure item and reduce the cost to complete that design, to the satisfaction of the collecting agency. Temporary works will not be accepted as works in kind.

Where the collecting agency agrees that works are to be provided by a development proponent in lieu of cash contribution (subject to the arrangements specified above):

- The credit for the works provided shall equal the final cost of the works as identified in the DCP, taking into account the impact of indexation
- The value of works provided in accordance with the principle outlined above will be offset against the development contributions liable to be paid by the development proponent
- No further financial contributions will be required until the agreed value of any credits are used.

4.1.3 Credit for over-provision

Where the collecting agency agrees that a development proponent can deliver an infrastructure item (either works and/or land), the situation may arise where the developer makes a contribution with a value that exceeds that required by the DCP.

In such a case the developer may be entitled to credits against other projects in the DCP to the extent of the excess contribution. Alternatively, a developer may seek an agreement with the collecting agency to provide cash reimbursement where an over-contribution has been made.

The details of credits and reimbursements for construction shall equal the final cost of the works identified in the DCP, taking into account the impact of indexation. The value of credits and reimbursements for the transfer of land will need to be at the values that are outlined in the DCP, subject to revaluation and indexation of the land as specified in Section 4.3.

4.1.4 Non-government schools

Where land is subdivided or developed for the purpose of a non-government school and the use of that land is subsequently for a purpose other than a non-government school, the owner of that land must pay to the collecting agency development contributions in accordance with the provision of the DCP. The development infrastructure levy and, where applicable, the community infrastructure levy must be paid within 28 days of the date of the commencement of the construction of any buildings or works for that alternative use.

4.1.5 Funds administration

The administration of the contributions made under the DCP will be transparent and development contributions charges will be held until required for provision of the items in that class. Details of funds received and expenditures will be held by the collecting agency in accordance with the provisions of the *Local Government Act 1989* and *the Act*.

The administration of contributions made under the DCP will be transparent and demonstrate the:

- Amount and timing of funds collected
- Source of the funds collected
- Amount and timing of expenditure on specific projects
- Project on which the expenditure was made
- Account balances for individual project classes
- Details of works in kind arrangements for project provision
- Pooling or quarantining of funds to deliver specific projects, where applicable.

The collecting agency will provide for regular monitoring, reporting and review of the monies received and expended in accordance with the DCP.

The collecting agency will establish interest bearing accounts and all monies held in these accounts will be used solely for the provision of infrastructure as itemised in the DCP, as required under section 46QA of *the Act*.

Should the collecting agency resolve to not proceed with any of the infrastructure projects listed in the DCP, the funds collected for these items will be used for the provision of alternative works in the same infrastructure class as specified in the DCP. Such funds may also be used for the provision of additional works, services or facilities where approved by the Minister responsible for *the Act*, or will be refunded to owners of land subject to these infrastructure charges.

4.2 Construction and land value costs indexation

Capital costs of all infrastructure items, including land, are in 2018 dollars and will be adjusted by the collecting agency annually for inflation.

In relation to the costs associated with infrastructure items other than land, the cost must be adjusted according to the following method:

- **Roads, intersections and bridges** – indexed in line with the Australian Bureau of Statistics' *Producer Prices Indexes, Road and Bridge Construction Index, Victoria*
- **All other infrastructure items** – indexed in line with the Australian Bureau of Statistics' *Producer Price Indexes, Non-Residential Building Construction Index, Victoria*.

Estimates of land value will be revised annually by a registered valuer based on a broad hectare methodology. Revisions may occur more frequently if market conditions warrant.

The collecting agency will publish the amended contributions on the collecting agency's website within 14 days of the adjustments being made.

4.3 Review period

The DCP commenced on the date when it was first incorporated into the Greater Shepparton Planning Scheme.

The DCP adopts a long-term outlook for future development in Shepparton North East.

The DCP is expected to be revised and updated every five years (or more frequently if required). This will require an amendment to the Greater Shepparton Planning Scheme to replace this document with an alternative, revised document. Any review will need to have regard to any arrangements (e.g. section 173 agreements under *the Act*) for the implementation of the DCP.

4.4 Adjustment to the scope of projects

The infrastructure projects in the DCP have been costed to a sufficient level of detail, however all of the projects will require a detailed design process prior to construction.

As part of detailed design, the council or a development proponent with the consent of the council may amend or modify some aspects of projects, so long as they are still generally in accordance with the PSP and any direction regarding the scope outlined in the DCP.

A development proponent may also propose material changes to the use and development of land from that contemplated in the PSP, leading to an increased requirement for infrastructure. In these cases there should be no negative impact on the DCP by requirement for the developer to bear the additional costs associated with the provision of the infrastructure item over and above the standard required by the DCP.

Where the council or another agency seeks to change the scope of a DCP infrastructure item to meet changing standards imposed by adopted policy or a public regulatory agency, such changes of standards and the resulting cost changes should normally be made through a change to the DCP at the time of a regular review of the DCP.

Where, after the DCP has been approved, a council or other agency proposes changes to the scope of a DCP infrastructure item for reasons other than changes in standards imposed by policy or regulation the net cost increases resulting from the change should normally be met by the agency requesting the change.

4.5 Collecting agency (agency responsible for collecting infrastructure levy)

Greater Shepparton City Council is the collecting agency pursuant to section 46K(1)(fa) of *the Act* which means that it is the public authority to which all levies are payable. As the collecting agency, council is responsible for the administration of the DCP and also its enforcement pursuant to section 46QC of *the Act*.

4.6 Development agency (agency responsible for works)

Greater Shepparton City Council is the development agency and is responsible for the provision of the designated infrastructure projects which are funded under the DCP and the timing of all works.

5.0 IMPLEMENTATION STRATEGY

This section provides further details regarding how the collecting agency intends to implement the DCP. In particular, this section clearly identifies the rationale for the implementation strategy and details the various measures that have been adopted to reduce the risk posed by the DCP to all parties.

5.1 Rationale for the implementation strategy

This implementation strategy has been included to provide certainty to both the collecting agency and development proponents. The implementation strategy recognises the complexities associated with infrastructure provision and funding and seeks to minimise risk to the collecting agency, development agency, development proponent and future community.

This implementation strategy has been formulated by:

- Assessing the PSP
- Having regard to the development context
- Assessing the need for finance requirements including upfront financing and pooling of funds
- Agreeing the land value and indexing it appropriately (where possible)
- Identifying preferred implementation mechanisms to achieve the above outcomes and reducing the risk associated with the DCP to ensure that it will be delivered as intended.

5.2 Implementation mechanism

Under section 46P of *the Act*, the collecting agency may accept (with the consent of the development agency where the collecting agency is not also the development agency) the provision of land, works, services or facilities by the applicant in part or full satisfaction of the amount of levy payment. This can be by agreement with the collecting agency before or after the application for the permit is made or before the development is carried out.

To coordinate the provision of infrastructure, Schedule 1 to the Urban Growth Zone in the Greater Shepparton Planning Scheme for the PSP requires an application for subdivision to be accompanied by an infrastructure plan to the satisfaction of the responsible authority.

The public infrastructure plan needs to show the location, type, staging and timing of infrastructure on the land as identified in the PSP or reasonably required as a result of the subdivision of the land and address the following:

- Stormwater drainage works
- Road works internal or external to the land consistent with any relevant traffic report or assessment
- The reserving or encumbrance of land for infrastructure, including for community facilities, sports reserves and open space
- Any infrastructure works which an applicant proposes to provide in lieu of development contributions in accordance with the DCP
- The effects of the provision of infrastructure on the land or any other land
- Any other relevant matter related to the provision of infrastructure reasonably required by the responsible authority.

Through the approval of these agreements, council (acting as the collecting agency) will consider if and what infrastructure should be provided as works in kind under the DCP in accordance with section 46P of *the Act*. The agreement must include a list of the DCP infrastructure projects that the collecting agency has agreed in writing to allow to be provided as works and/or land in lieu.

6.0 APPENDICES

6.1 Appendix A – Property specific land budget

Detailed information on the developable area for each property is included in the property-specific land budget with each PSP.

PSP PARCEL ID	TOTAL AREA (HECTARES)	TRANSPORT	COMMUNITY & EDUCATION			DRAINAGE RESERVE		PARKS	OTHER	TOTAL NET DEVELOPABLE AREA – RESIDENTIAL (HECTARES)
		NON-ARTERIAL ROAD WIDENING & INTERSECTION FLARING (DCP LAND)	GOVERNMENT SCHOOL – EXISTING & POTENTIAL EXPANSION	NON-GOVERNMENT SCHOOL – EXISTING & POTENTIAL EXPANSION	LOCAL COMMUNITY FACILITY (DCP LAND)	WATERWAY AND DRAINAGE RESERVE	WATERWAY AND DRAINAGE RESERVE (DCP LAND)	DISTRICT/LOCAL PARK (DCP LAND)	PROPOSED LAND FOR ROUNDABOUT	
1	18.16	0.33	–	–	0.40	–	2.03	2.17	–	13.23
2	5.63	–	0.34	–	–	2.17	–	–	–	3.12
3	23.04	0.09	–	–	–	–	2.55	–	1.40	19.01
4	8.63	0.01	–	–	–	–	–	0.05	–	8.57
5	0.40	–	–	–	–	–	–	–	–	0.40
6	25.04	–	–	–	–	–	–	0.70	–	24.34
7	0.55	–	–	–	–	–	–	–	–	0.55
8	0.47	–	–	–	–	–	–	–	–	0.47
9	0.49	–	–	–	–	–	–	–	–	0.49
10	0.53	–	–	–	–	–	–	–	–	0.53
11	0.10	–	–	0.10	–	–	–	–	–	–
12	9.04	–	–	5.25	–	–	–	–	–	3.79
13	18.23	0.37	–	–	–	–	1.31	0.45	–	16.10
14	17.01	–	0.87	–	–	–	–	–	–	16.14
15	1.62	–	1.62	–	–	–	–	–	–	–
16	0.40	–	–	–	–	–	–	–	–	0.40
17	12.22	–	–	–	–	–	0.74	0.25	–	11.23
18	0.40	–	–	–	–	–	–	–	–	0.40
19	0.41	–	–	–	–	–	–	–	–	0.41
20	4.13	–	–	–	–	–	–	–	–	4.13
21	0.40	–	–	–	–	–	–	–	–	0.40
22	1.21	–	–	–	–	1.21	–	–	–	–
23	0.23	–	–	–	–	0.23	–	–	–	–
24	0.72	–	–	–	–	0.72	–	–	–	–
25	23.91	–	0.73	–	–	0.15	2.49	0.70	–	19.84
26	2.54	–	–	–	–	0.36	–	–	–	2.18
27	1.36	–	–	–	–	1.36	–	–	–	–
TOTAL	**176.87**	**0.79**	**3.56**	**5.35**	**0.40**	**6.19**	**9.12**	**4.32**	**1.40**	**145.74**

6.2 Appendix B – Project cost estimates & concept designs

The following cost estimates and designs are provided for information purposes only to provide an indication of how the DCP project costs were calculated. All projects will be subject to detail design prior to delivery.

North East Growth Corridor Shepparton

Road Name: 24m Wide Connector Level 1 Street
Limit of works: As shown on drawing road reserve and cross section vary
Length of Job: Length of road works is inbetween intersections
Notes: Costs based on Greater Shepparton City Council specification for road construction & typical road cross sections provided

Item	Unit	Rate	wide	units		cost/m		Unit cost	Quantity		subset	subtotal	Amount
			m			width			metres		cost		
Roadworks	subtotal							$ 2,319.48	150	m		$ 347,922.50	$ 347,923
Bulk Earthworks	m³	$ 33.00	6.55	metres	$ 33	$ 216.15	m					$ 32,422.50	$ -
Pavement (Urban)	m²	$ 72.00	11.6	metres	$ 72	$ 835.20	m					$ 125,280.00	$ -
Crushed Rock Shoulder	m²	$ 20.00	0	metres	$ 20	$ -	m					$ -	$ -
Pavement Removal	m³	$ 50.00	0	metres		$ -						$ -	
kerb and Channel Barrier	m	$ 68.00	2	sides	$ 68	$ 136.00	m					$ 20,400.00	$ -
Kerb and Channel S 504		$ 68.00	0	sides	$ 68	$ -	m					$ -	
side entry pits std	unit	$ 2,376.00	2	interval metres	90		no					$ 7,920.00	$ 7,920
Shared pathway 2.5m wide concrete	m²	$ 76.00	2.5	metres		$ 190.00						$ 28,500.00	
Pedestrian Footpath 2.5m wide concrete	m²	$ 76.00	2.5	metres		$ 190.00						$ 28,500.00	
Drainage , subgrade drain	m	$ 19.00	2		$ 19	$ 38.00	m					$ 5,700.00	$ -
Linemarking & Signage	m	$ 13.00	2	metres	$ 13	$ 26.00	m					$ 3,900.00	$ -
Landscaping refer plantings	m	$ 20.00	0	metres	$ 20	$ -	m					$ -	$ -
Concrete infill	m²	$ 76.00	0		$ 76	$ -	m					$ -	$ -
level / trim top soil nature strip	m²	$ 7.00	7.4	metres	$ 7	$ 51.80	m					$ 7,770.00	$
Tree Planting 2 - 2.5m tall	unit	$25/m-$150/tree	2	rows of trees	$ 27	$ 54.00	m					$ 8,100.00	
Tube Stock Plantings	unit	$5.27 -$6.78	0	metres wide	$ 6	$ -	m					$ -	$ -
300mm dia conc drain Stormwater Cr BF	per metre	$165	50	metres		$ 55.00						$ 8,250	
375mm conc drain stormwater Cr Bk fill	per metre	$190	50	metres		$ 63.33						$ 9,500	
450mm conc drain stormwater Cr BF	per metre	$228	50	metres		$ 76.00						$ 11,400	
525mm conc drain stormwater Cr BF	per metre	$299	0	metres		$ -						$ -	
Pedestrian Traffic Signals	Unit	$ 134,000.00	0									$ -	$ -
Traffic Signals	Unit	$ 102,500.00	0	No of intersection								$ -	$ -
Traffic Signal Conduit subset	m	$ 35.00	0	metres								$ -	$ -
Street Lighting	m	$ 140.00	2	rows of lights		$ 280.00	m					$ 42,000.00	
lighting conduit	m	$ 54.00	2	No of runs/sides		$ 108.00	m					$ 16,200.00	
Subtotal						$ 2,319.48						$ 355,842.50	
estimated total													$ 355,843
Site Establishment										2.5%			$ 8,896
Contingency										15.0%			$ 53,376
Total + contingencies													
Services relocation Sec Poles, water fittings	Item												$ -
Council Fees										3.25%			$ 11,565
VicRoads Fees										1%			$ 3,558
Traffic Management										5%			$ 17,792
Survey and Design										5%			$ 17,792
Environmental Management										0.5%			$ 1,779
Supervision and Project Management										9.0%			$ 32,026
Total excluding land cost													**$ 502,628**
Land Acquisition	hectares	$ -		hectares						111%			$ -
Total Estimated Cost													**$ 502,628**
Adopted Cost													

Estimate Prepared by: **CDCE** Sep-18

North East Growth Corridor Shepparton

Road Name: 30m Wide Connector Level 2 Street
Limit of works: As shown on drawing road reserve and cross section vary
Length of Job: Length of road works is inbetween intersections
Notes: Costs based on Greater Shepparton City Council specification for road construction & typical road cross sections provided

Item	Unit	Rate	wide	units		cost/m		Unit cost	Quantity		subset	subtotal	Amount
			m			width			metres		cost		
Roadworks	subtotal							$ 2,522.23	150	m		$ 378,335.00	$ 378,335
Bulk Earthworks	m³	$ 33.00	7.3	metres	$ 33	$ 240.90	m					$ 36,135.00	$ -
Pavement (Urban)	m²	$ 72.00	11.6	metres	$ 72	$ 835.20	m					$ 125,280.00	$ -
Crushed Rock Shoulder	m²	$ 20.00	0	metres	$ 20	$ -	m					$ -	$ -
Pavement Removal	m³	$ 50.00	0	metres		$ -						$ -	
kerb and Channel Barrier	m	$ 68.00	2	sides	$ 68	$ 136.00	m					$ 20,400.00	$ -
Kerb and Channel S 504		$ 68.00	2	sides	$ 68	$ 136.00	m					$ 20,400.00	
side entry pits std	unit	$ 2,376.00	2	interval metres	90		no					$ 7,920.00	$ 7,920
Shared pathway 2.5m wide concrete	m²	$ 76.00	2.5	metres		$ 190.00						$ 28,500.00	
Pedestrian Footpath 2.5m wide concrete	m²	$ 76.00	2.5	metres		$ 190.00						$ 28,500.00	
Drainage , subgrade drain	m	$ 19.00	2		$ 19	$ 38.00	m					$ 5,700.00	$ -
Linemarking & Signage	m	$ 13.00	2	metres	$ 13	$ 26.00	m					$ 3,900.00	$ -
Landscaping refer plantings	m	$ 20.00	0	metres	$ 20	$ -	m					$ -	$ -
Concrete infill	m²	$ 76.00	0		$ 76	$ -	m					$ -	$ -
level / trim top soil nature strip	m²	$ 7.00	13.4	metres	$ 7	$ 93.80	m					$ 14,070.00	$
Tree Planting 2 - 2.5m tall	unit	$25/m-$150/tree	2	rows of trees	$ 27	$ 54.00	m					$ 8,100.00	
Tube Stock Plantings	unit	$5.27 -$6.78	0	metres wide	$ 6	$ -	m					$ -	$ -
300mm dia conc drain Stormwater Cr BF	per metre	$165	50	metres		$ 55.00						$ 8,250	
375mm conc drain stormwater Cr Bk fill	per metre	$190	50	metres		$ 63.33						$ 9,500	
450mm conc drain stormwater Cr BF	per metre	$228	50	metres		$ 76.00						$ 11,400	
525mm conc drain stormwater Cr BF	per metre	$299	0	metres		$ -						$ -	
Pedestrian Traffic Signals	Unit	$ 134,000.00	0									$ -	$ -
Traffic Signals	Unit	$ 102,500.00	0	No of intersection								$ -	$ -
Traffic Signal Conduit subset	m	$ 35.00	0	metres								$ -	$ -
Street Lighting	m	$ 140.00	2	rows of lights		$ 280.00	m					$ 42,000.00	
lighting conduit	m	$ 54.00	2	No of runs/sides		$ 108.00	m					$ 16,200.00	
Subtotal						$ 2,522.23						$ 386,255.00	
estimated total													$ 386,255
Site Establishment										2.5%			$ 9,656
Contingency										15.0%			$ 57,938
Total + contingencies													
Services relocation Sec Poles, water fittings	Item												$ -
Council Fees										3.25%			$ 12,553
VicRoads Fees										1%			$ 3,863
Traffic Management										5%			$ 19,313
Survey and Design										5%			$ 19,313
Environmental Management										0.5%			$ 1,931
Supervision and Project Management										9%			$ 34,763
Total excluding land cost													**$ 545,585**
Land Acquisition	hectares	$ -		hectares						111%			$ -
Total Estimated Cost													**$ 545,585**
Adopted Cost													

Estimate Prepared by: **CDCE** Sep-18

North East Growth Corridor Shepparton

Road Name: Verney Road Ryeland Drive intersection (IN-01)
Limit of works: As shown on drawing road reserve and cross section vary
Length of Job: Intersection works only 30m wide connection
Notes: Costs based on Greater Shepparton City Council specification for road construction & typical road cross sections provided

Item	Unit	Rate	wide	units		cost/m		Unit cost	Quantity		subset	subtotal	Amount
			m			width			metres		cost		
Roadworks	subtotal							$ 316,030.00	1	m		$ 316,030.00	$ 316,030
Bulk Earthworks	m³	$ 33.00	1063	metres	$ 33	$ 35,079.00	m					$ 35,079.00	$ -
Pavement (Urban)	m²	$ 72.00	1414	metres	$ 72	$ 101,808.00	m					$ 101,808.00	$ -
Crushed Rock Shoulder	m²	$ 20.00	0	metres	$ 20	$ -	m					$ -	$ -
Pavement Removal	m³	$ 50.00	102	metres		$ 5,100.00						$ 5,100.00	
kerb and Channel Barrier	m	$ 68.00	286	sides	$ 68	$ 19,448.00	m					$ 19,448.00	$ -
kerb and Channel Rollover	m	$ 68.00	120	sides	$ 68	$ 8,160.00	m					$ -	$ -
side entry pits std	unit	$ 2,376.00	4	interval metres	90	$ 9,504.00	m					$ 9,504.00	
Shared pathway 2.5m wide concrete	m²	$ 76.00	410	metres		$ 31,160.00						$ 31,160.00	
Pedestrian Footpath 1.5m wide concrete	m²	$ 76.00	0	metres		$ -						$ -	
Drainage , subgrade drain	m	$ 19.00	426		$ 19	$ 8,094.00	m					$ 8,094.00	$ -
Linemarking & Signage	m	$ 13.00	456	metres	$ 13	$ 5,928.00	m					$ 5,928.00	$ -
Landscaping refer plantings	m	$ 20.00	0	metres	$ 20	$ -	m					$ -	$ -
Concrete infill	m²	$ 76.00	54		$ 76	$ 4,104.00	m					$ 4,104.00	$ -
level / trim top soil nature strip	m²	$ 7.00	1016	metres	$ 7	$ 7,112.00	m					$ 7,112.00	$
Tree Planting 2 - 2.5m tall	unit	$25/m-$150/tree	75	rows of trees	$ 27	$ 2,025.00	m					$ 2,025.00	
Tube Stock Plantings	unit	$5.27 -$6.78	0	metres wide	$ 6	$ -	m					$ -	$ -
300mm dia conc drain Stormwater Cr BF	per metre	$165		metres		$ -						$ -	
375mm conc drain stormwater Cr Bk fill	per metre	$190	82	metres		$ 15,580.00						$ 15,580	
450mm conc drain stormwater Cr BF	per metre	$228	82	metres		$ 18,696.00						$ 18,696	
525mm conc drain stormwater Cr BF	per metre	$299	0	metres		$ -						$ -	
Pedestrian Traffic Signals	Unit	$ 134,000.00	0									$ -	$ -
Traffic Signals	Unit	$ 111,520.00	4	No of intersection								$ 446,080	$ 446,080
Traffic Signal Conduit subset	m	$ 38.00	363	metres								$ 13,794.00	$ 13,794
Street Lighting	m	$ 140.00	228	rows of lights		$ 31,920.00	m					$ 31,920.00	
lighting conduit	m	$ 54.00	228	No of runs/sides		$ 12,312.00	m					$ 12,312.00	
Subtotal						$ 316,030.00						$ 767,744.00	
estimated total													$ 775,904
Site Establishment										2.5%			$ 19,398
Contingency										15.0%			$ 116,386
Total + contingencies												$ 911,687	
lowering Gas main	Item												$ 35,000
Council Fees										3.25%			$ 25,217
VicRoads Fees										1%			$ 7,759
Traffic Management										5%			$ 38,795
Survey and Design										5%			$ 38,795
Environmental Management										0.5%			$ 3,880
Supervision and Project Management										9%			$ 69,831
Total excluding land cost													**$ 1,130,964**
Land Acquisition	hectares	$ -		hectares						0%			$ -
Total Estimated Cost													**$ 1,130,964**
Adopted Cost													

Estimate Prepared by: **CDCE** Oct-18

North East Growth Corridor Shepparton

Road Name: Verney & Pine Roads intersection (IN-02)
Limit of works: As shown on drawing road reserve and cross section vary
Length of Job: Intersection works only 30m wide connector
Notes: Costs based on Greater Shepparton City Council specification for road construction & typical road cross sections provided

Item	Unit	Rate	wide	units		cost/m		Unit cost	Quantity		subset	subtotal	Amount
			m			width			metres		cost		
Roadworks	subtotal							$ 325,650.60	1	m		$ 325,650.60	$ 325,651
Bulk Earthworks	m³	$ 33.00	1017	metres	$ 33	$ 33,561.00	m					$ 33,561.00	$ -
Pavement (Urban)	m²	$ 72.00	1440	metres	$ 72	$ 103,680.00	m					$ 103,680.00	$ -
Crushed Rock Shoulder	m²	$ 20.00	0	metres	$ 20	$ -	m					$ -	$ -
Pavement Removal	m³	$ 50.00	68	metres		$ 3,400.00						$ 3,400.00	
kerb and Channel Barrier	m	$ 68.00	298	sides	$ 68	$ 20,264.00	m					$ 20,264.00	$ -
kerb and Channel Rollover	m	$ 68.00	104	sides	$ 68	$ 7,072.00	m					$ -	$ -
side entry pits std	unit	$ 2,376.00	4	interval metres	90	$ 9,504.00	m					$ 9,504.00	
Shared pathway 2.5m wide concrete	m²	$ 76.00	232	metres		$ 17,632.00						$ 17,632.00	
Pedestrian Footpath 2.5m wide concrete	m²	$ 76.00	232	metres		$ 17,632.00						$ 17,632.00	
Drainage , subgrade drain	m	$ 19.00	402		$ 19	$ 7,638.00	m					$ 7,638.00	$ -
Linemarking & Signage	m	$ 13.00	387	metres	$ 13	$ 5,031.00	m					$ 5,031.00	$ -
Landscaping refer plantings	m	$ 20.00	0	metres	$ 20	$ -	m					$ -	$ -
Concrete infill	m²	$ 76.00	80.6		$ 76	$ 6,125.60	m					$ 6,125.60	$ -
level / trim top soil nature strip	m²	$ 7.00	1246	metres	$ 7	$ 8,722.00	m					$ 8,722.00	$
Tree Planting 2 - 2.5m tall	unit	$25/m-$150/tree	86	rows of trees	$ 27	$ 2,322.00	m					$ 2,322.00	
Tube Stock Plantings	unit	$5.27 -$6.78	0	metres wide	$ 6	$ -	m					$ -	$ -
300mm dia conc drain Stormwater Cr BF	per metre	$165	93	metres		$ 15,345.00						$ 15,345	
375mm conc drain stormwater Cr Bk fill	per metre	$190	93	metres		$ 17,670.00						$ 17,670	
450mm conc drain stormwater Cr BF	per metre	$228	0	metres		$ -						$ -	
525mm conc drain stormwater Cr BF	per metre	$299	0	metres		$ -						$ -	
Pedestrian Traffic Signals	Unit	$ 134,000.00	0									$ -	$ -
Traffic Signals	Unit	$ 111,520.00	4	No of intersection								$ 446,080	$ 446,080
Traffic Signal Conduit subset	m	$ 38.00	363	metres								$ 13,794.00	$ 13,794
Street Lighting	m	$ 140.00	258	rows of lights		$ 36,120.00	m					$ 36,120.00	
lighting conduit	m	$ 54.00	258	No of runs/sides		$ 13,932.00	m					$ 13,932.00	
Subtotal						$ 325,650.60						$ 778,452.60	
estimated total													$ 785,525
Site Establishment										2.5%			$ 19,638
Contingency										15.0%			$ 117,829
Total + contingencies												$ 922,991	
lowering Gas main	Item												$ 35,000
Council Fees										3.25%			$ 25,530
VicRoads Fees										1%			$ 7,855
Traffic Management										5%			$ 39,276
Survey and Design										5%			$ 39,276
Environmental Management										0.5%			$ 3,928
Supervision and Project Management										9%			$ 70,697
Total excluding land cost													**$ 1,144,553**
Land Acquisition	hectares	$ -		hectares						0%			$ -
Total Estimated Cost													**$ 1,144,553**
Adopted Cost													

Estimate Prepared by: **CDCE** Oct-18

North East Growth Corridor Shepparton

Road Name: Connector to Roundabout Ford St and Grahamvale Roads (IN-03)
Limit of works: As shown on drawing road reserve and cross section vary
Length of Job: Intersection works only
Notes: Costs based on Greater Shepparton City Council specification for road construction & typical road cross sections provided

Item	Unit	Rate	wide	units		cost/m		Unit cost	Quantity		subset	subtotal	Amount
			m			width			metres		cost		
Roadworks	subtotal							$ 949,347.00	1	m		$ 949,347.00	$ 949,347
Bulk Earthworks	m³	$ 33.00	716	metres	$ 33	$ 23,628.00	m					$ 23,628.00	$ -
Pavement (Urban)	m²	$ 72.00	1190	metres	$ 72	$ 85,680.00	m					$ 85,680.00	$ -
Crushed Rock Shoulder	m²	$ 20.00	0	metres	$ 20	$ -	m					$ -	$ -
Pavement Removal	m³	$ 50.00	0	metres		$ -						$ -	
kerb and Channel Rollover	m	$ 68.00	96	sides	$ 68	$ 6,528.00	m					$ 6,528.00	$ -
kerb and Channel Barrier	m	$ 68.00	176	sides	$ 68	$ 11,968.00	m					$ -	$ -
G-MW drain Bridge		$ 744,749.00	1	bridge		$ 744,749.00	m					$ 744,749.00	
side entry pits std	unit	$ 2,376.00	2	interval metres	90	$ 4,752.00	m					$ 4,752.00	
Shared pathway 2.5m wide concrete	m²	$ 76.00	315	metres		$ 23,940.00						$ 23,940.00	
Pedestrian Footpath 1.5m wide concrete	m²	$ 76.00	0	metres		$ -						$ -	
Drainage , subgrade drain	m	$ 19.00	272		$ 19	$ 5,168.00	m					$ 5,168.00	$ -
Linemarking & Signage	m	$ 13.00	50	metres	$ 13	$ 650.00	m					$ 650.00	$ -
Landscaping refer plantings	m	$ 20.00	0	metres	$ 20	$ -	m					$ -	$ -
Concrete infill	m²	$ 76.00	42		$ 76	$ 3,192.00	m					$ 3,192.00	$ -
level / trim top soil nature strip	m²	$ 7.00	2016	metres	$ 7	$ 14,112.00	m					$ 14,112.00	$
Tree Planting 2 - 2.5m tall	unit	$25/m-$150/tree	40	rows of trees	$ 27	$ 1,080.00	m					$ 1,080.00	
Tube Stock Plantings	unit	$5.27 -$6.78	0	metres wide	$ 6	$ -	m					$ -	$ -
300mm dia conc drain Stormwater Cr BF	per metre	$165	40	metres		$ 6,600.00						$ 6,600	
375mm conc drain stormwater Cr Bk fill	per metre	$190	40	metres		$ 7,600.00						$ 7,600	
450mm conc drain stormwater Cr BF	per metre	$228	0	metres		$ -						$ -	
525mm conc drain stormwater Cr BF	per metre	$299	0	metres		$ -						$ -	
Pedestrian Traffic Signals	Unit	$ 134,000.00	0									$ -	$ -
Traffic Signals	Unit	$ 111,520.00	0	No of intersection								$ -	$ -
Traffic Signal Conduit subset	m	$ 38.00	0	metres								$ -	$ -
Street Lighting	m	$ 140.00	50	rows of lights		$ 7,000.00	m					$ 7,000.00	
lighting conduit	m	$ 54.00	50	No of runs/sides		$ 2,700.00	m					$ 2,700.00	
Subtotal						$ 949,347.00						$ 937,379.00	
estimated total													$ 949,347
Site Establishment										2.5%			$ 23,734
Contingency										15.0%			$ 142,402
Total + contingencies												$ 1,115,483	
relocation of 1 sec pole & ancillaries	Item												$ 25,000
Council Fees										3.25%			$ 30,854
VicRoads Fees										1%			$ 9,493
Traffic Management										5%			$ 47,467
Survey and Design										5%			$ 47,467
Environmental Management										0.5%			$ 4,747
Supervision and Project Management										9%			$ 85,441
Total excluding land cost													**$ 1,365,953**
Land Acquisition	hectares	$ -		hectares						0%			$ -
Total Estimated Cost													**$ 1,365,953**
Adopted Cost													

Estimate Prepared by: **CDCE** Oct-18

North East Growth Corridor Shepparton

Road Name: Foot Bridge Crossing 20m Clear Span, 2.5m wide with 3m wide foundations
Limit of works: Bridge and approach ramps
Length of Job: modular Bridge, foundations, concrete approach ramps
Notes: Costs based on Greater Shepparton City Council G-MW requirements as provided

Item	Unit	Rate	wide	units		cost/m		Unit cost	Quantity		subset	subtotal	Amount
			m			width			metres		cost		
Roadworks	subtotal							$ 76,375.00	1	m		$ 76,375.00	$ 76,375
Bulk Earthworks	m³	$ 33.00	25	metres	$ 33	$ 825.00	m					$ 825.00	$ -
G-MW drain foot bridge 20m span		$ 50,000.00	1	bridge		$ 50,000.00	m					$ 50,000.00	
Installation	unit	$ 20,000.00	1	install		$ 20,000.00	m					$ 20,000.00	
Shared pathway 2.5m wide concrete	m²	$ 76.00	25	area		$ 1,900.00						$ 1,900.00	
Concrete foundations	m³	$ 195.00	18		$ 195	$ 3,510.00	m					$ 3,510.00	$ -
level / trim top soil nature strip	m²	$ 7.00	20	metres	$ 7	$ 140.00	m					$ 140.00	$
Subtotal						$ 76,375.00						$ 76,375.00	
estimated total													$ 76,375
Site Establishment										2.5%			$ 1,909
Contingency										20.0%			$ 15,275
Total + contingencies												$ 93,559	
relocation of 1 sec pole & ancillaries	Item												$ -
Council Fees										3.25%			$ 2,482
VicRoads Fees										1%			$ 763.75
Traffic Management										5%			$ 3,819
Survey and Design										5%			$ 3,819
Environmental Management										0.5%			$ 382
Supervision and Project Management										9%			$ 6,874
Total excluding land cost													**$ 111,698**
Land Acquisition	hectares	$ -		hectares						0%			$ -
Total Estimated Cost													**$ 111,698**
Adopted Cost													

Estimate Prepared by: **CDCE** Sep-18

NOTES AND ASSUMPTIONS FOR ACCESS ROAD D 26m RESERVE
1: Traffic Management considered to be Low in complexity
2: Survey & Design is considered to be Medium complexity due to no intersection included
3: Overheads and supervision include site establishment
4: Contingency (construction) is a % of the estimated cost of works known
5: Service relocation cost is based on:
a) Nil green field site

SCHEMATIC LAYOUT FOR COSTING PURPOSES ONLY

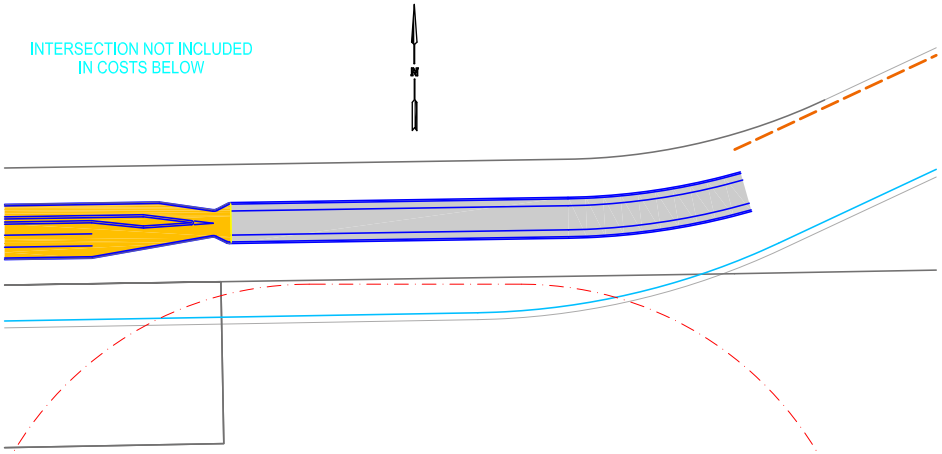
NORTH EAST GROWTH CORRIDOR

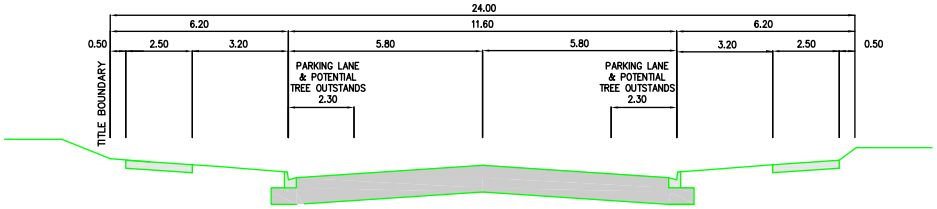
150m COLLECTOR LEVEL 1 24m WIDTH

COSTED ROAD

INTERSECTION AREA

INTERSECTION NOT INCLUDED IN COSTS BELOW





24m WIDE CONNECTOR LEVEL 1 STREET

LEGEND

PROPOSED DRAINAGE	GAS MAIN	G	FIRE PLUG	SEWER MANHOLE	GRAVEL DRIVE	PSM
PROPOSED DRAINAGE PITS	WATER MAIN	W	STOP VALVE	TELEPHONE PIT	CONCRETE DRIVE	TITLE PEG
EXISTING DRAINAGE	TELEPHONE U/G	T	FIRE HYDRANT	TELEPHONE POLE	THICKENED PATH	NATURAL SURFACE
EXISTING DRAINAGE PITS	POWER U/G	E	POWER POLE	TELEPHONE BOX	TREE	HOUSE NO.
PROPOSED KERB AND CHANNEL	POWER OVERHEAD	E	LIGHT POLE	GAS VALVE	TREE REMOVAL	LOT/LP NO. 65
EXISTING KERB AND CHANNEL	SEWER MAIN	S	POWER PIT	HOUSE DRAIN	TREE STUMP	PIT NO.

AMENDMENTS

DATE	REMARKS	REV	APP

DATUM: N/A
SCALE NOT TO SCALE
COORD. SYS.: N/A
F.B. L.B.
JOB NO. 11 1150
SURVEY N/A
DWG. FILE NAME XXXXXX.DWG
DESIGN SAF
REG. FILE NO. XXXXXXX
DRAWN SAF
MELWAY REF
CHECKED SAF
CONTRACT NO.

CIVIL DESIGN CONSULTING ENGINEERS

NORTH EAST GROWTH CORRIDOR DEVELOPMENT CONTRIBUTIONS PLAN (DCP)

150m COLLECTOR LEVEL 1 24m WIDE ROAD RESERVE

DATE: September 2018
REVISION
11 115
SHEET 1 OF 1

NOTES AND ASSUMPTIONS FOR ACCESS ROAD D 34m RESERVE
1: Traffic Management considered to be Low in complexity
2: Survey & Design is considered to be Medium complexity due to no intersection included
3: Overheads and supervision include site establishment
4: Contingency (construction) is a % of the estimated cost of works known
5: Service relocation cost is based on:
a) Nil green field site

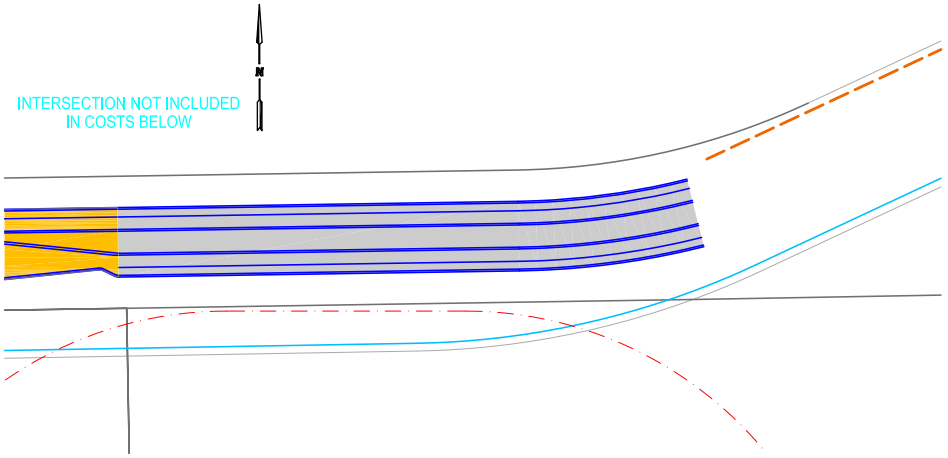
SCHEMATIC LAYOUT FOR COSTING PURPOSES ONLY

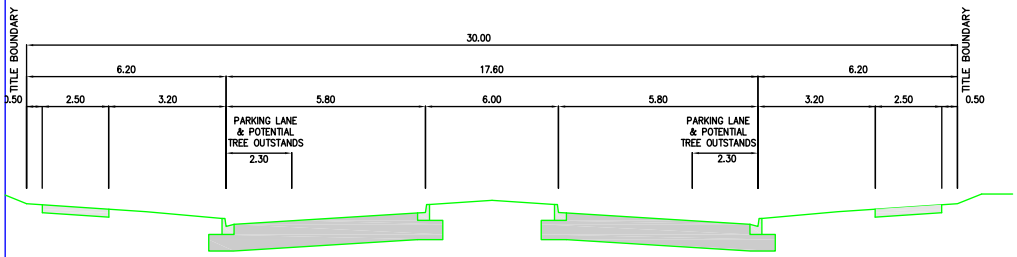
NORTH EAST GROWTH CORRIDOR

150m COLLECTOR LEVEL 2 30m WIDTH

COSTED ROAD

INTERSECTION AREA





30m WIDE CONNECTOR LEVEL 2 STREET

LEGEND

PROPOSED DRAINAGE	GAS MAIN	FIRE PLUG	SEWER MANHOLE	GRAVEL DRIVE	PSM
PROPOSED DRAINAGE PITS	WATER MAIN	STOP VALVE	TELEPHONE PIT	CONCRETE DRIVE	TITLE PEG
EXISTING DRAINAGE	TELEPHONE U/G	FIRE HYDRANT	TELEPHONE POLE	THICKENED PATH	NATURAL SURFACE
EXISTING DRAINAGE PITS	POWER U/G	POWER POLE	TELEPHONE BOX	TREE	HOUSE NO.
PROPOSED KERB AND CHANNEL	POWER OVERHEAD	LIGHT POLE	GAS VALVE	TREE REMOVAL	LOT/LP NO. 65
EXISTING KERB AND CHANNEL	SEWER MAIN	POWER PIT	HOUSE DRAIN	TREE STUMP	PIT NO.

AMENDMENTS

DATE	REMARKS	REV	APP

DATUM: N/A
SCALE NOT TO SCALE
COORD. SYS.: N/A
F.B. L.B.
JOB NO. 11 1150
SURVEY N/A
DWG. FILE NAME XXXXXX.DWG
DESIGN SAF
REG. FILE NO. XXXXXXX
TRACED SAF
MELWAY REF
CHECKED SAF
CONTRACT NO.

CIVIL DESIGN CONSULTING ENGINEERS

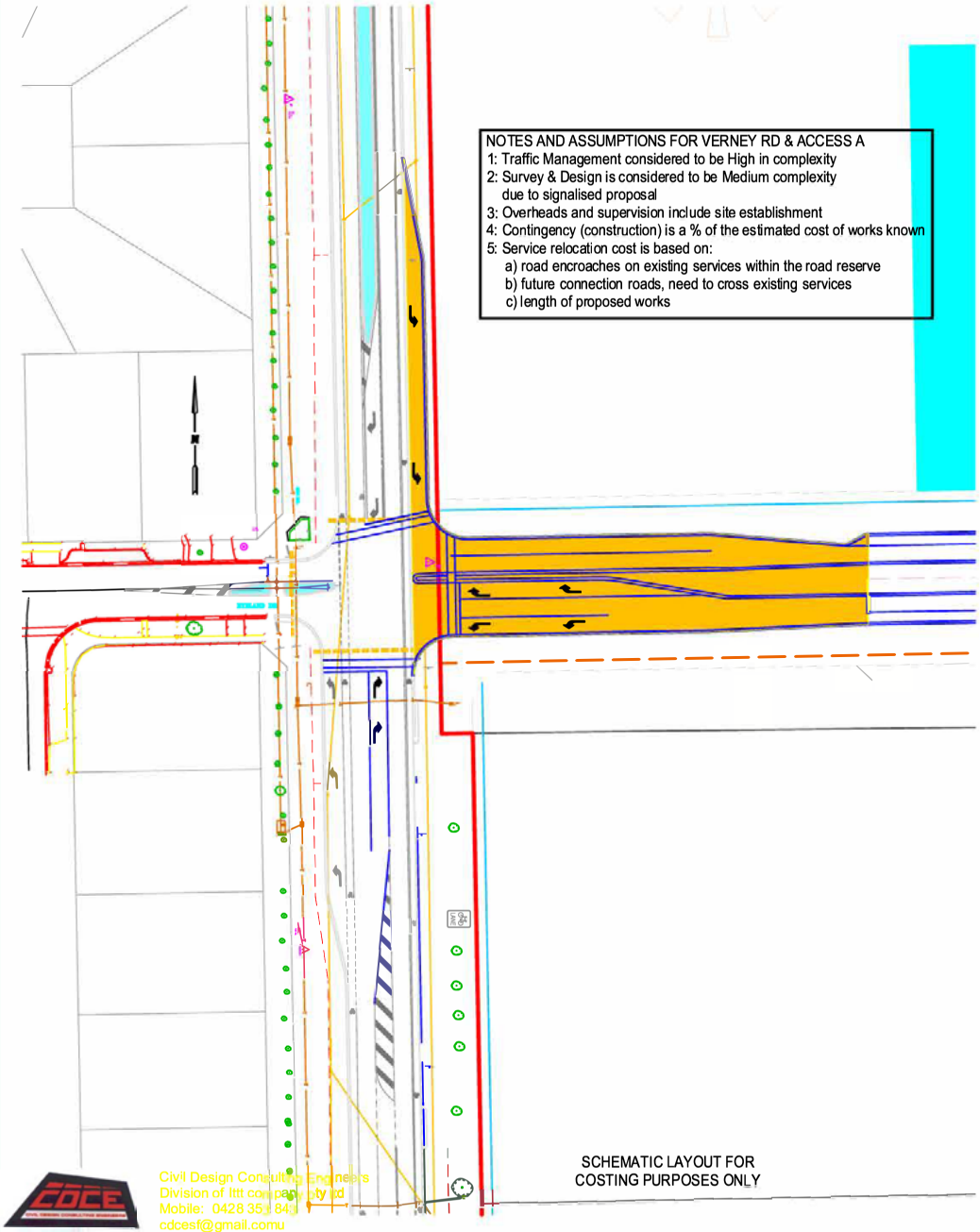
NORTH EAST GROWTH CORRIDOR DEVELOPMENT CONTRIBUTIONS PLAN (DCP)

150M OF COLLECTOR LEVEL 2 30m WIDE ROAD RESERVE

DATE: September 2018
REVISION
11 115
SHEET 1 OF 1

NORTH EAST GROWTH CORRIDOR

VERNEY ROAD & RYELAND DRIVE INTERSECTION
IN-0130m WIDE



NOTES AND ASSUMPTIONS FOR VERNEY RD & ACCESS A
1: Traffic Management considered to be High in complexity
2: Survey & Design is considered to be Medium complexity due to signalised proposal
3: Overheads and supervision include site establishment
4: Contingency (construction) is a % of the estimated cost of works known
5: Service relocation cost is based on:
a) road encroaches on existing services within the road reserve
b) future connection roads, need to cross existing services
c) length of proposed works

ROAD

INTERSECTION AREA

SCHEMATIC LAYOUT FOR
COSTING PURPOSES ONLY

Civil Design Consulting Engineers
Division of Itt company pty ltd
Mobile: 0428 35 1 84
cdcesf@gmail.com

LEGEND

PROPOSED DRAINAGE	GAS MAIN	G	FIRE PLUG	SEWER MANHOLE	GRAVEL DRIVE	DSM
PROPOSED DRAINAGE PITS	WATER MAIN	W	STOP VALVE	TELEPHONE PIT	CONCRETE DRIVE	TITLE PEG
EXISTING DRAINAGE	TELEPHONE U/G	T	FIRE HYDRANT	TELEPHONE POLE	THICKENED PATH	NATURAL SURFACE
EXISTING DRAINAGE PITS	POWER U/G	E	POWER POLE	TELEPHONE BOX	TREE	HOUSE NO.
PROPOSED KERB AND CHANNEL	POWER OVERHEAD	E	LIGHT POLE	GAS VALVE	TREE REMOVAL	LOT/LP NO.
EXISTING KERB AND CHANNEL	SEWER MAIN	S	POWER PIT	HOUSE DRAIN	TREE STUMP	PIT NO.

AMENDMENTS

DATE	REMARKS	REV	APP

DATUM: N/A
COORD. SYS.: N/A
F.B. L.B.
SURVEY N/A
DESIGN SAF
TRACED SAF
CHECKED SAF

SCALE NOT TO SCALE
JOB NO. 11 115
DWG. FILE NAME XXXXXX.DWG
REG. FILE NO. XXXXXXX
MELWAY REF.
CONTRACT NO.

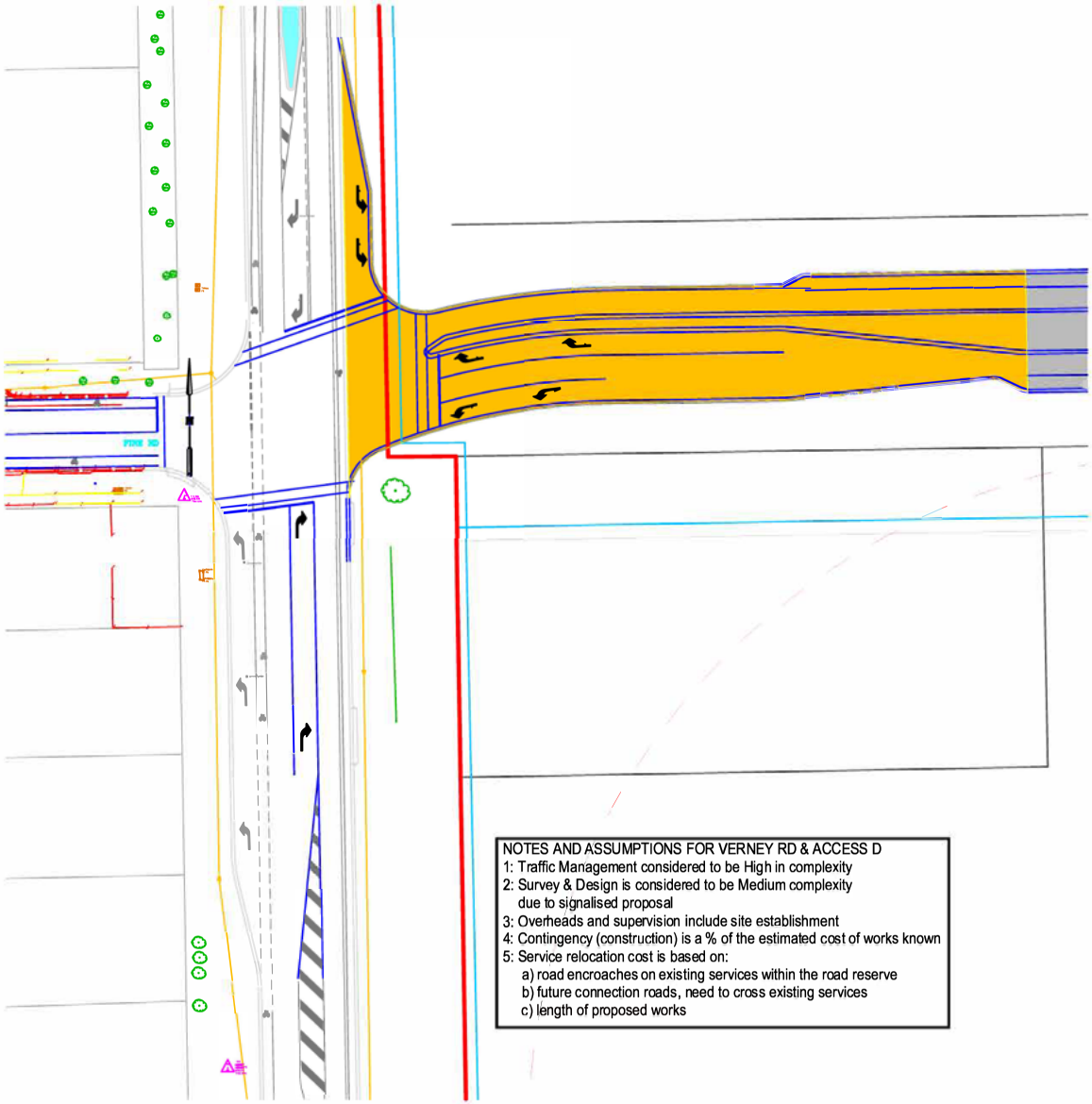
CIVIL DESIGN CONSULTING ENGINEERS

NORTH EAST GROWTH CORRIDOR
DEVELOPMENT CONTRIBUTIONS PLAN (DCP)
VERNEY ROAD & RYELAND DRIVE INTERSECTION
IN-01 ACCESS A 30m WIDE

DATE: September 2018
REVISION
11 115
SHEET 1 OF 1

NORTH EAST GROWTH CORRIDOR

VERNEY & PINE ROADS INTERSECTION
IN-02 30m WIDE



ROAD

INTERSECTION AREA COSTED

NOTES AND ASSUMPTIONS FOR VERNEY RD & ACCESS D
1: Traffic Management considered to be High in complexity
2: Survey & Design is considered to be Medium complexity due to signalised proposal
3: Overheads and supervision include site establishment
4: Contingency (construction) is a % of the estimated cost of works known
5: Service relocation cost is based on:
a) road encroaches on existing services within the road reserve
b) future connection roads, need to cross existing services
c) length of proposed works

SCHEMATIC LAYOUT FOR COSTING PURPOSES ONLY

Civil Design Consulting Engineers
Division of Ittt company pty ltd
Mobile: 0428 353 843
cdcesf@gmail.comu

LEGEND

PROPOSED DRAINAGE	GAS MAIN	FIRE PLUG	SEWER MANHOLE	GRAVEL DRIVE	PSM		
PROPOSED DRAINAGE PITS	WATER MAIN	STOP VALVE	TELEPHONE PIT	CONCRETE DRIVE	TITLE PEG		
EXISTING DRAINAGE	TELEPHONE U/G	FIRE HYDRANT	TELEPHONE POLE	THICKENED PATH	NATURAL SURFACE		
EXISTING DRAINAGE PITS	POWER U/G	POWER POLE	TELEPHONE BOX	TREE	HOUSE NO.		
PROPOSED KERB AND CHANNEL	POWER OVERHEAD	LIGHT POLE	GAS VALVE	TREE REMOVAL	CDT/LP NO.	65	
EXISTING KERB AND CHANNEL	SEWER MAIN	POWER PIT	HOUSE DRAIN	TREE STUMP	PIT NO.		

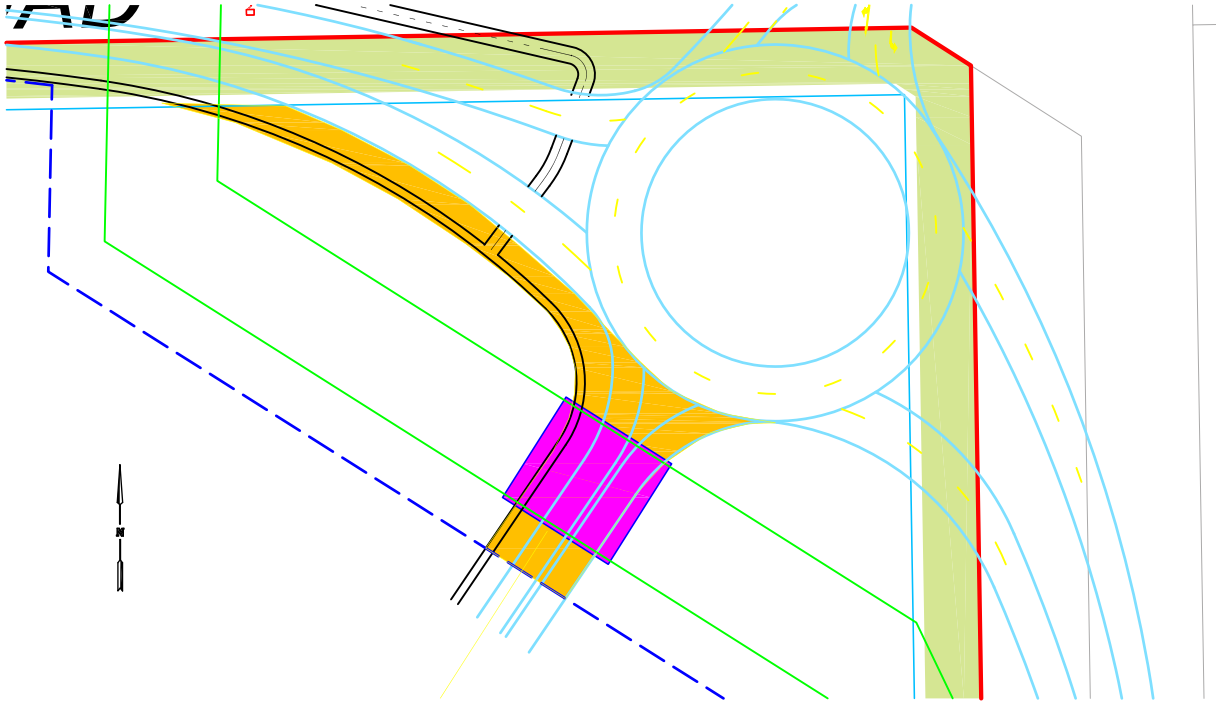
AMENDMENTS

DATE	REMARKS	REV	APP

DATUM: N/A	SCALE NOT TO SCALE	CIVIL DESIGN CONSULTING ENGINEERS	
COORD. SYS.: N/A		NORTH EAST GROWTH CORRIDOR DEVELOPMENT CONTRIBUTIONS PLAN (DCP)	DATE: September 2018
F.B. L.B.	JOB NO. 11 115	VERNEY & PINE ROADS INTERSECTION	REVISION
SURVEY N/A	DWG. FILE NAME XXXXXX.DWG	IN–02 ACCESS D 30m WIDE	11 115
DESIGN SAF	REG. FILE NO. XXXXXXX		
TRACED SAF	MELWAY REF.		SHEET 1 OF 1
CHECKED SAF	CONTRACT NO.		

NORTH EAST GROWTH CORRIDOR

FORD & GRAHAMVALE ROADS INTERSECTION
IN-03 CONNECTION TO ROUNDABOUT



BRIDGE DECK

INTERSECTION AREA COSTED

NOTES AND ASSUMPTIONS FOR FORD ROAD & GRAHAMVALE ROAD
1: Traffic Management considered to be High in complexity
2: Survey & Design is considered to be Low complexity due to minor works on Ford Rd
3: Overheads and supervision include site establishment
4: Contingency (construction) is a % of the estimated cost of works known
5: Service relocation cost is based on:
a) road encroaches on existing services within the road reserve
b) future connection roads, need to cross existing services
c) length of proposed works

SCHEMATIC LAYOUT FOR COSTING PURPOSES ONLY

Civil Design Consulting Engineers
Division of Ittt company pty ltd
Mobile: 0428 353 843
cdcesf@gmail.comu

LEGEND

PROPOSED DRAINAGE	GAS MAIN G	FIRE PLUG	SEWER MANHOLE	GRAVEL DRIVE	PSM
PROPOSED DRAINAGE PITS	WATER MAIN W	STOP VALVE	TELEPHONE PIT	CONCRETE DRIVE	TITLE PEG
EXISTING DRAINAGE	TELEPHONE U/G T	FIRE HYDRANT	TELEPHONE POLE	THICKENED PATH	NATURAL SURFACE
EXISTING DRAINAGE PITS	POWER U/G E	POWER POLE	TELEPHONE BOX	TREE	HOUSE NO.
PROPOSED KERB AND CHANNEL	POWER OVERHEAD E	LIGHT POLE	GAS VALVE	TREE REMOVAL	LOT/LP NO. 65

AMENDMENTS

DATE	REMARKS	REV	APP

DATUM: N/A
SCALE NOT TO SCALE
COORD. SYS.: N/A
F.B. L.B.
JOB NO. 11 1150
SURVEY N/A
DWG. FILE NAME XXXXXX.DWG
DESIGN SAF
REG. FILE NO. XXXXXX
TRACED SAF
MELWAY REF.
CONTRACT NO.

CIVIL DESIGN CONSULTING ENGINEERS

NORTH EAST GROWTH CORRIDOR
DEVELOPMENT CONTRIBUTIONS PLAN (DCP)
FORD & GRAHAMVALE ROADS INTERSECTION
IN–03 CONNECTION TO ROUNDABOUT

DATE: September 2018
REVISION
11 115
SHEET 1 OF 1

Shepparton

NE DCP
Community Facility

Cost Plan 1 rev C
Concept Design

10 July 2018

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Shepparton
NE DCP
Community Facility

Cost Plan 1 rev C
Concept Design

EXECUTIVE SUMMARY

10 July 2018

Introduction

The Cost Plan is based on Concept Design documents from Outlines.

Cost Estimates

The current anticipated total costs are based on a competitive lump sum tender.

New Building
$5,258,000

Refer to the attached Cost Plan 1 rev C for details.

Inclusions

The Cost Plan includes allowances for the following:

- Building works
- External works and external services
- Demolition
- Landscaping
- Design contingencies
- Contract contingencies
- Consultants' fees
- Supply authority charges
- Management support costs

Exclusions

The Cost Plan excludes the following:

- Rock excavation
- Asbestos removal
- Site decontamination
- ESD options
- IT and communications equipment
- Additional costs due to Construction Management or Negotiated Contracts
- Disbursements
- Furniture, furnishings and equipment
- Cost escalation up to completion of construction July, 2020
- Cost escalation after July, 2020
- GST
- Additional costs for staging of construction
- Project risk contingency
- Temporary accommodation and decanting
- Locality allowance
- Property purchase

Shepparton
NE DCP
Community Facility

Cost Plan 1 rev C
Concept Design

10 July 2018

COST PLAN SUMMARY

Community Facility

COST COMPONENT			Area m2	$/m²	$
Site preparation and demolition					Excluded
Dual Room Kindergarten	New		240m²	$2,900	696,000
Community meeting space	New		110m²	$2,600	286,000
Group Room	New		30m²	$2,800	84,000
MCH rooms	New		40m²	$2,800	112,000
Breastfeeding room	New		16m²	$2,800	44,800
Meeting/interview rooms	New		20m²	$2,600	52,000
Techers Office	New		20m²	$2,800	56,000
Staff rooms	New		25m²	$2,800	70,000
Kitchen	New		26m²	$4,000	104,000
Toilets for staff and children	New		64m²	$4,000	256,000
Cleaners Cupboard	New		9m²	$2,400	21,600
Waiting area	New		12m²	$2,800	33,600
Equipment Storage	New		40m²	$2,400	96,000
Foyer, lobby and corridors	New		260m²	$2,600	676,000
Entry Canopy and verandah	New		150m²	$1,200	180,000
TOTAL - BUILDING COST (TBC)			**1062 m2**	**$2,606**	**2,768,000**
Asbestos removal					excluded
Site decontamination					excluded
Carparking, civil, landscape and irrigation works			1814m²	$250	453,500
Outdoor area for kindergarten and community			1124m²	$400	449,600
External services and infrastructure upgrades		5.00%			138,000
Building maintenance - 1 year					Excluded
Landscape maintenance - 1 year					Excluded
ESD Options					excluded
Locality allowance					excluded
Additional costs for staging					excluded
Design Contingency		5.00%			190,000
Contruction Contingency		10.00%			381,000
TOTAL - CONSTRUCTION COST (TCC)			**1062 m2**	**$4,125**	**4,381,000**

Shepparton
NE DCP
Community Facility

Cost Plan 1 rev C
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COST PLAN SUMMARY

Community Facility

COST COMPONENT		Area m2	$/m²	$
Council fes	3.25%			Excluded
Authority Fees	1.00%			44,000
Traffic management	2.00%			88,000
Environment Management	0.50%			22,000
Survey/Design	5.00%			219,000
Supervision & project management	9.00%			394,000
Site establishment	2.50%			110,000
Temporary relocation of existing facilities				excluded
Furniture, furnishings and equipment				excluded
IT and communications equipment				excluded
Property purchase				excluded
TOTAL - PROJECT COST (TPC) (Jul, 2018)		**1062 m2**	**$4,951**	**5,258,000**

Cost Escalation

Up To	Date	Months	% / year	Weighting	Total %	
Tender	Jul, 19	12	3.00%	100%	3.00%	excluded
Completion	Jul, 20	12	3.00%	70%	2.10%	excluded

Project Risk and Delay Contingency	1.50%			excluded
Goods and Services Tax	10.00%			excluded
TOTAL - END COST (TEC) (Jul, 2020)		**1062 m2**	**$4,951**	**5,258,000**

Shepparton NE DCP

Local & District Park & Retarding Basin Cost Plan No. 1 Revision B Concept Design

19 September 2018

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Introduction

The Cost Plan is based on Concept Design documents from Outlines.

Cost Estimates

The current anticipated Total End Cost is $3,549,000.

District Park	$2,615,000
Local Park	$640,000
Retardation Basin	$294,000

Refer to the attached Cost Plan No. 1 for details.

Inclusions

The Cost Plan includes allowances for the following:

- Building works
- External works and external services
- Demolition
- Landscaping
- Design contingencies
- Contract contingencies
- Consultants' fees
- Supply authority charges

Exclusions

The Cost Plan excludes the following:

- Rock excavation
- Site decontamination
- Rainwater harvesting
- IT and Communications equipment
- Disbursements
- Furniture, furnishings and equipment
- Cost escalation up to completion of construction May, 2019
- Cost escalation after May, 2019
- GST
- Additional costs for staging of the works

Shepparton NE
Local & District Park
& Retarding Basin
Cost Plan No. 1
Revision B
Concept Design

19 September 2018

COST PLAN SUMMARY

COST COMPONENT					m²	$/m²	Total	District Park	Local Park	Retardation Basin
District Park					22000 m²	$83/m²	1,835,000	1,835,000	-	-
Local Park					7000 m²	$64/m²	447,000	-	447,000	
Retardation Basin					20000 m²	$13/m²	254,000	-		254,000
Design Contingency					5.00%		128,000	92,000	23,000	13,000
Contract Contingency					10.00%		267,000	193,000	47,000	27,000
TOTAL CONSTRUCTION COST (TCC) (May, 2018)							**2,931,000**	**2,120,000**	**517,000**	**294,000**
Council Fees					3.25%		86,000	69,000	17,000	inc in Eng Cost
Authority Fees					1.00%		28,000	22,000	6,000	inc in Eng Cost
Traffic Management					2.00%		54,000	43,000	11,000	inc in Eng Cost
Environmental Management					0.50%		14,000	11,000	3,000	inc in Eng Cost
Survey/Design					5.00%		132,000	106,000	26,000	inc in Eng Cost
Supervision & Project Managament					9.00%		238,000	191,000	47,000	inc in Eng Cost
Site establishment					2.50%		66,000	53,000	13,000	inc in Eng Cost
Furniture, furnishings and equipment							excluded	excluded	excluded	inc in Eng Cost
TOTAL PROJECT COST (TPC) (May, 2018)							**3,549,000**	**2,615,000**	**640,000**	**294,000**
Cost Escalation										
Up To	Date	Months	% / year	Weighting	Total %					
Tender	Nov, 18	6	3.00%	100%	1.50%		excluded	excluded	excluded	excluded
Completion	May, 19	6	3.00%	70%	1.05%		excluded	excluded	excluded	excluded
Goods and Services Tax					10.00%		excluded	excluded	excluded	excluded
TOTAL END COST (TEC) (May, 2019)							**3,549,000**	**2,615,000**	**640,000**	**294,000**

Shepparton NE DCP
Local & District Park
& Retarding Basin
Cost Plan No. 1
Revision B
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19 September 2018

DETAILED COST PLAN
District Park

Buildings and Paved Area	1540 m²
Soft Landscape Area	20460 m²
Total	22000 m²

	Quantity		Rate	Total
EXTERNAL WORKS				
XP **Site Preparation**				
Demolition/site scraping		Provisional		265,000
Bulk earthworks including cut and fill to new levels		Provisional		60,000
Site decontamination		Excluded		-
Total Site Preparation		$211.04/m²FECA $14.77/m²GFA		**325,000**
XR **Roads and Paving**				
100mm thick pedestrian grade plain concrete paving	1092	m²	100.00	109,200
Asphalt multi-use half court on base	293	m²	80.00	23,440
Line marking		Item		2,500
50mm cement stabilised granitic sand with steel edging and brushed rock base	155	m²	40.00	6,200
Total Roads and Paving		$91.78/m²FECA $6.42/m²GFA		**141,340**
XN **Fences and Walls**				
Perimeter post and rail fencing	221	m	250.00	55,250
Tree protection fencing		Nil		-
Total Fences and Walls		$35.88/m²FECA $2.51/m²GFA		**55,250**
XB **External Buildings, Structures and Furniture**				
Furniture and Fixtures				
Bike racks including footings	3	No	600.00	1,800
Rubbish bins (dual)	3	No	2,500.00	7,500
Park bench with backrest	4	No	2,000.00	8,000
Picnic table	3	No	4,000.00	12,000
Picnic shelter (Prefab)		Item		20,000
BBQ		Provisional		10,000

Shepparton NE DCP
Local & District Park
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DETAILED COST PLAN
District Park

Buildings and Paved Area	1540 m²
Soft Landscape Area	20460 m²
Total	22000 m²

	Quantity		Rate	Total
Basketball ring		Item		5,000
Playground equipment		Provisional		350,000
Single prefabricated toilet		Provisional		150,000
Total External Buildings, Structures and Furniture		$366.43/m²FECA $25.65/m²GFA		**564,300**
XL **Landscaping**				
Hydromulched grass and 100mm topsoil	19915	m²	10.00	199,150
Garden bed with 200mm topsoil and 75mm organic mulch	179	m²	30.00	5,370
Irrigation - to all garden beds and grass		Provisional		205,000
Organic softfall mulch	366	m²	25.00	9,150
150mm pot plants to garden beds (6/m2)		Item		21,500
45L pot trees	110	No	250.00	27,500
Establishment and maintenance for 104 weeks		Item		104,000
Artwork		Excluded		-
Total Landscaping		$371.21/m²FECA $25.99/m²GFA		**571,670**
Sub-total EXTERNAL WORKS		$1076.62/m²FECA $75.36/m²GFA		**1,658,000**
EXTERNAL SERVICES				
XK **Stormwater Drainage**				
Stormwater drainage		Provisional		65,000
Swale		Provisional		37,000
Total Stormwater Drainage		$66.23/m²FECA $4.64/m²GFA		**102,000**
XD **Sewer Drainage**				
Sewer drainage		Provisional		15,000
Total Sewer Drainage		$9.74/m²FECA $0.68/m²GFA		**15,000**
XW **External Water Services**				
Connection to existing water system		Provisional		11,000

Shepparton NE DCP
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DETAILED COST PLAN
District Park

Buildings and Paved Area	1540 m²
Soft Landscape Area	20460 m²
Total	22000 m²

	Quantity	Rate	Total
Drinking fountain and refill post	1 No	7,000.00	7,000
Total External Water Services	$11.69/m²FECA $0.82/m²GFA		**18,000**
XF **External Fire Services**			
External fire services	Excluded		-
Total External Fire Services	$0.00/m²FECA $0.00/m²GFA		**-**
XG **External Gas Services**			
Connection to existing gas system	Nil		-
Total External Gas Services	$0.00/m²FECA $0.00/m²GFA		**-**
XE **External Electrical Services**			
Electrical services	Provisional		42,000
Total External Electrical Services	$27.27/m²FECA $1.91/m²GFA		**42,000**
XC **External Communications**			
Nil	Excluded		-
Total External Communications	$0.00/m²FECA $0.00/m²GFA		**-**
XS **External Special Services**			
External special services	Nil		-
Total External Special Services	$0.00/m²FECA $0.00/m²GFA		**-**
Sub-total EXTERNAL SERVICES	$114.94/m²FECA $8.05/m²GFA		**177,000**
PRELIMINARIES, OVERHEADS AND PROFIT	8.00%		**-**
TOTAL - SITEWORKS COST (TSC)			**1,835,000**
TOTAL - END COST (TEC) (Refer Cost Plan Summary)			**3,549,000**

Shepparton NE DCP
Local & District Park
& Retarding Basin
Cost Plan No. 1
Revision B
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19 September 2018

DETAILED COST PLAN
Local Park

Buildings and Paved Area	346 m²
Soft Landscape Area	6654 m²
Total	7000 m²

	Quantity		Rate	Total
EXTERNAL WORKS				
XP **Site Preparation**				
Demolition/site scraping	Provisional			85,000
Bulk earthworks including cut and fill to new levels	Provisional			15,000
Site decontamination	Excluded			-
Total Site Preparation	$289.02/m²FECA $14.29/m²GFA			**100,000**
XR **Roads and Paving**				
100mm thick pedestrian grade plain concrete paving with light broom finish	153	m²	100.00	15,300
50mm cement stabilised granitic sand with steel edging and brushed rock base	193	m²	40.00	7,720
Total Roads and Paving	$66.53/m²FECA $3.29/m²GFA			**23,020**
XN **Fences and Walls**				
Bollards	Nil			-
Tree protection fencing	Nil			-
Total Fences and Walls	$0.00/m²FECA $0.00/m²GFA			**-**
XB **External Buildings, Structures and Furniture**				
Furniture and Fixtures				
Rubbish bins (dual)	1	No	2,500.00	2,500
Park bench with backrest	4	No	2,000.00	8,000
Playground equipment	Nil			-
Natural play items	Provisional			50,000
Shade sale	Item			39,000
Total External Buildings, Structures and Furniture	$287.57/m²FECA $14.21/m²GFA			**99,500**
XL **Landscaping**				
Hydromulched grass and 100mm topsoil	6323	m²	10.00	63,230
Garden bed with 200mm topsoil and 75mm organic mulch	63	m²	30.00	1,890

Shepparton NE DCP
Local & District Park
& Retarding Basin
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DETAILED COST PLAN
Local Park

plancost

Buildings and Paved Area	346 m²
Soft Landscape Area	6654 m²
Total	7000 m²

	Quantity		Rate	Total
Irrigation - to kick about area and garden beds		Provisional		30,000
Organic softfall mulch	268	m²	25.00	6,700
150mm pot plants to garden beds (6/m2)		Item		8,000
45L pot trees	58	No	250.00	14,500
Establishment and maintenance for 104 weeks		Item		52,000
Artwork		Excluded		-
Total Landscaping		$509.60/m²FECA $25.19/m²GFA		**176,320**
Sub-total EXTERNAL WORKS		$1153.18/m²FECA $57.00/m²GFA		**399,000**
EXTERNAL SERVICES				
XK **Stormwater Drainage**				
Stormwater drainage		Provisional		25,000
Swale		Provisional		23,000
Total Stormwater Drainage		$138.73/m²FECA $6.86/m²GFA		**48,000**
XD **Sewer Drainage**				
Sewer drainage		Nil		-
Total Sewer Drainage		$0.00/m²FECA $0.00/m²GFA		**-**
XW **External Water Services**				
Connection to existing water system		Nil		-
Drinking fountain and refill post		Nil		-
Total External Water Services		$0.00/m²FECA $0.00/m²GFA		**-**
XF **External Fire Services**				
External fire services		Excluded		-
Total External Fire Services		$0.00/m²FECA $0.00/m²GFA		**-**
XG **External Gas Services**				

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DETAILED COST PLAN
Local Park

Buildings and Paved Area	346 m²
Soft Landscape Area	6654 m²
Total	7000 m²

	Quantity	Rate	Total
Connection to existing gas system	Nil		-
Total External Gas Services	$0.00/m²FECA $0.00/m²GFA		**-**
XE **External Electrical Services**			
Electrical services	Nil		-
Total External Electrical Services	$0.00/m²FECA $0.00/m²GFA		**-**
XC **External Communications**			
Nil	Excluded		-
Total External Communications	$0.00/m²FECA $0.00/m²GFA		**-**
XS **External Special Services**			
External special services	Nil		-
Total External Special Services	$0.00/m²FECA $0.00/m²GFA		**-**
Sub-total EXTERNAL SERVICES	$138.73/m²FECA $6.86/m²GFA		**48,000**
PRELIMINARIES, OVERHEADS AND PROFIT	8.00%		**-**
TOTAL - SITEWORKS COST (TSC)			**447,000**
TOTAL - END COST (TEC) (Refer Cost Plan Summary)			**3,549,000**

Shepparton NE DCP
Local & District Park
& Retarding Basin
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DETAILED COST PLAN
Retarding Basin

Buildings and Paved Area	627 m²
Soft Landscape Area	19373 m²
Total	20000 m²

	Quantity		Rate	Total
EXTERNAL WORKS				
XP **Site Preparation**				
Demolition/site scraping	Provisional			inc in Eng Costing
Bulk earthworks including basin and cut and fill to new levels	Provisional			inc in Eng Costing
Site decontamination	Excluded			-
Total Site Preparation	$0.00/m²FECA $0.00/m²GFA			**-**
XR **Roads and Paving**				
50mm cement stabilised granitic sand with steel edging and brushed rock base	627	m²	40.00	25,080
Fine crushed rock maintenance access track	By others			-
Total Roads and Paving	$40.00/m²FECA $1.25/m²GFA			**25,080**
XN **Fences and Walls**				
Bollards	2	No	800.00	1,600
Tree protection fencing	Nil			-
Total Fences and Walls	$2.55/m²FECA $0.08/m²GFA			**1,600**
XB **External Buildings, Structures and Furniture**				
Furniture and Fixtures				
Park bench with backrest	2	No	2,000.00	4,000
Total External Buildings, Structures and Furniture	$6.38/m²FECA $0.20/m²GFA			**4,000**
XL **Landscaping**				
Hydromulched grass and 100mm topsoil	14127	m²	10.00	141,270
Wetland planting	By others			-
Rock lining to bed creek	770	m²	55.00	42,350
Rock lining to sed basin	337	m²	70.00	23,590
Irrigation	Nil			-
45L pot trees	62	No	250.00	15,500

Shepparton NE DCP
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DETAILED COST PLAN
Retarding Basin

Buildings and Paved Area	627 m²
Soft Landscape Area	19373 m²
Total	20000 m²

	Quantity	Rate	Total
Establishment and maintenance for 52 weeks	Excluded		-
Artwork	Excluded		-
Total Landscaping	$355.20/m²FECA $11.14/m²GFA		**222,710**
Sub-total EXTERNAL WORKS	$405.10/m²FECA $12.70/m²GFA		**254,000**
EXTERNAL SERVICES			
XK **Stormwater Drainage**			
Stormwater drainage	Item		inc in Eng Costing
Total Stormwater Drainage	$0.00/m²FECA $0.00/m²GFA		**-**
XD **Sewer Drainage**			
Sewer drainage	Nil		-
Total Sewer Drainage	$0.00/m²FECA $0.00/m²GFA		**-**
XW **External Water Services**			
External water services	Nil		-
Total External Water Services	$0.00/m²FECA $0.00/m²GFA		**-**
XF **External Fire Services**			
External fire services	Excluded		-
Total External Fire Services	$0.00/m²FECA $0.00/m²GFA		**-**
XG **External Gas Services**			
Connection to existing gas system	Nil		-
Total External Gas Services	$0.00/m²FECA $0.00/m²GFA		**-**
XE **External Electrical Services**			
Electrical services	Nil		-
Total External Electrical Services	$0.00/m²FECA $0.00/m²GFA		**-**
XC **External Communications**			

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DETAILED COST PLAN
Retarding Basin

Buildings and Paved Area	627 m²
Soft Landscape Area	19373 m²
Total	20000 m²

	Quantity	Rate	Total
Nil	Excluded		-
Total External Communications	$0.00/m²FECA $0.00/m²GFA		**-**
XS **External Special Services**			
External special services	Nil		-
Total External Special Services	$0.00/m²FECA $0.00/m²GFA		**-**
Sub-total EXTERNAL SERVICES	$0.00/m²FECA $0.00/m²GFA		**-**
PRELIMINARIES, OVERHEADS AND PROFIT	8.00%		**-**
TOTAL - SITEWORKS COST (TSC)			**254,000**

NOTES:

REFERENCE DOCUMENTS

This drawing shows the minimum acceptable level of landscaping required by the Greater Shepparton Shire Council

Refer to Infrastructure Design Manual Version 5.10 for specifications

Refer to Landscape Plan Guide for developments in Campaspe Shire Council, City of Greater Shepparton and Moira Shire Council

PLAY

Concrete borders are to be installed around playgrounds

Locate a minimum 20m from street or road

Drainage lines are to be installed inside the playground area with an external discharge point outside of concrete border

IRRIGATION

Provide pop-up irrigation to grass kick-about area

MAINTENANCE

Landscape to be provided by developer following practical completion, including all watering requirements

104 week maintenance

LEGEND

EOW — Extent of Works

SOFT LANDSCAPE

- Proposed Evergreen Trees in 45L pot
- Proposed Deciduous Trees in 45L pot
- Proposed Garden Bed with 100mm depth of topsoil, subgrade cultivated to min 200mm, 75mm depth organic mulch & 150mm pots @ 6/m2. Allow for spade edging & drip irrigation.
- Proposed Hydromulched Grass with 100mm depth of topsoil. Allow for drip irrigation to kick-about area only.
- Proposed Hydromulched Grassed Mound
- Grass Swale

LANDSCAPE SURFACES

- Proposed Pedestrian Grade Plain Concrete Pavement with Light Broom Finish
- Proposed 50mm Cement Stabilised Granitic Sand/ Toppings with steel edging over 50mm compacted crushed rock sub-base
- Proposed Organic Softfall Mulch

FURNITURE & FIXTURES

S — Proposed Council Standard Seat on min. 3m x 1.5m concrete slab

RB — Proposed Council Standard 80L Rubbish & Recycle Bins on concrete slab

Proposed Shade Sail Over Play Area

Proposed Nature Play Items including timber logs, timber steppers & mudstone boulders

Drawing Title:	Local Park Reference Design
Project Name:	Shepparton North East DCP
Drawn By:	BW / SR
Drawn Date:	06.07.18

0 2.5 5 7.5 10 12.5m

Scale: 1:250 @ A1 / 1:500 @ A3

N

NOTES:

REFERENCE DOCUMENTS

This drawing shows the minimum acceptable level of landscaping required by the Greater Shepparton Shire Council

Refer to Infrastructure Design Manual Version 5.10 for specifications

Refer to Landscape Plan Guide for developments in Campaspe Shire Council, City of Greater Shepparton and Moira Shire Council

PLAY

Concrete borders are to be installed around playgrounds

Locate a minimum 20m from street or road

Drainage lines are to be installed inside the playground area with an external discharge point outside of concrete border

IRRIGATION

Provide pop-up irrigation to all garden beds & grassed areas

MAINTENANCE

Landscape to be provided by developer following practical completion, including all watering requirements

104 week maintenance

LEGEND

EOW — Extent of Works

SOFT LANDSCAPE

- Proposed Evergreen Trees with drip irrigation & ag. drain. 45L pot
- Proposed Deciduous Trees with drip irrigation & ag. drain. 45L pot
- Proposed Garden Bed with 100mm depth of topsoil, subgrade cultivated to min 200mm, 75mm depth organic mulch & 150mm pots @ 6/m2. Allow for steel edging, ag. drain & drip irrigation.
- Proposed Hydromulched Grass with 100mm depth of topsoil. Allow for drip irrigation.
- Proposed Hydromulched Grassed Mound
- Grass Swale

LANDSCAPE SURFACES

- Proposed Pedestrian Grade Plain Concrete Pavement with Broom Finish
- Proposed Asphalt Basketball Half-Court with line marking
- Proposed 50mm Cement Stabilised Granitic Sand/ Toppings with steel edging over 50mm compacted crushed rock sub-base
- Proposed Organic Softfall Mulch

FURNITURE & FIXTURES

- S — Proposed Council Standard Seat on min. 3m x 1.5m concrete slab
- Proposed Shade Shelter
- P — Council Standard Picnic Settings on min. 3m x 3m concrete slab
- BBQ — Proposed Double BBQ on concrete slab.
- RB — Proposed Council Standard 80L Standard & Recycle Bins on concrete slab.
- B — Proposed Council Standard Bicycle Hoop
- DF — Proposed Council Standard Drinking Fountain With Drainage Point, Dog Bowl And Disabled Access
- Proposed Automated Public Toilet - Exeloo Galaxy Super Single Auto
- Proposed 100 x 100mm cypress post and 50mm diam gal pipe rail fencing at 1.5m ctrs with breaks at 20m ctrs. Removable bollard at 2.5m wide path entry.
- Proposed Playscape Creations "Winnipeg" & Fall Zone
- Proposed A-Space "Whirl Swing" & Fall Zone
- Proposed Playscape Creations "Spring Whale/Car" & Fall Zone
- Proposed A-Space "Explorer Net" & Fall Zone

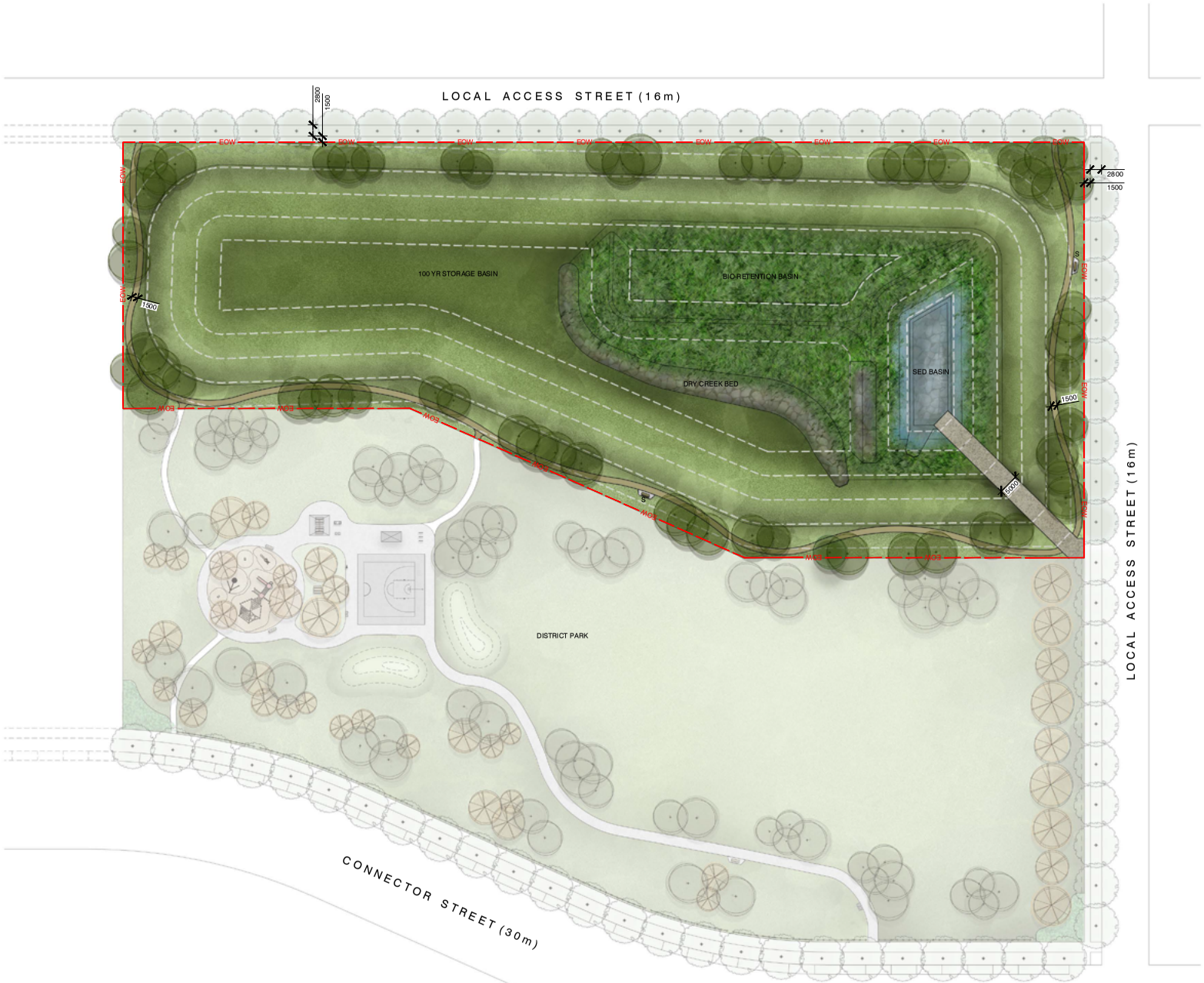
Drawing Title:	District Park Reference Design
Project Name:	Shepparton North East DCP
Drawn By:	BW / SR
Drawn Date:	06.07.18

0 5 10 15 20 25m

Scale: 1:500 @ A1 / 1:1000 @ A3

N

vpa GREATER SHEPPARTON OUTLINES



NOTE:

REFERENCE DOCUMENTS

This drawing shows the minimum acceptable level of landscaping required by the Greater Shepparton Shire Council

Refer to Infrastructure Design Manual Version 5.10 for specifications

Refer to Landscape Plan Guide for developments in Campaspe Shire Council, City of Greater Shepparton and Moira Shire Council

WSUD ELEMENTS

Species selection is to be locally available indigenous species from the species list contained in the Landscape Plan Guide

Aquatic vegetation in shallow marsh, deep marsh and ephemeral areas should be protected during establishment period with the use of netting to achieve at least 80% survival rate at handover

Floodways and open native grassland areas are to be seeded to have established grass cover of at least 90% at handover

Floodways and open native grassland areas are to be seeded to have established grass cover of at least 90% at handover

LEGEND

EOW — Extent of Works

SOFT LANDSCAPE

- Proposed Evergreen Trees in 45L pot
- Wetland Planting
- Proposed Hydromulched Grass
- Permanent Water Body
- Rock Lining / Base To Engineer's Details

LANDSCAPE SURFACES

- Proposed 50mm Cement Stabilised Granitic Sand/ Toppings with steel edging over 50mm compacted crushed rock sub-base.
- Fine Crushed Rock / Maintenance Access Track. 2 no. removable bollards at path entry

FURNITURE & FIXTURES

S — Proposed Council Standard Seat on min. 3m x 1.5m concrete slab

Drawing Title: Retardation Basin Reference Design

Project Name: Shepparton North East DCP

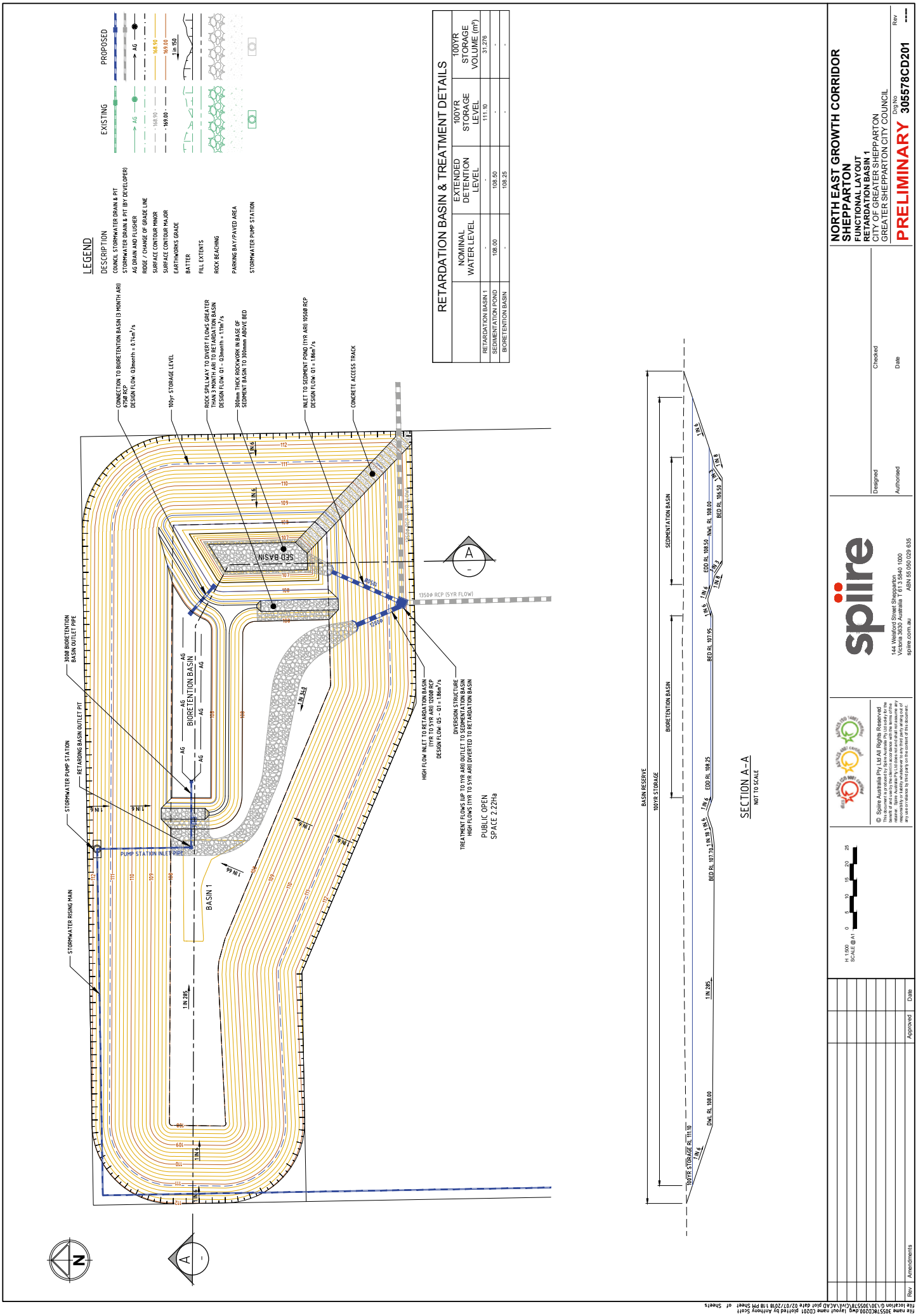
Drawn By: BW / SR

Drawn Date: 06.07.18

0 5 10 15 20 25m

Scale: 1:500 @ A1 / 1:1000 @ A3

N


LEGEND
DESCRIPTION
EXISTING
PROPOSED
COUNCIL STORMWATER DRAIN & PIT
STORMWATER DRAIN & PIT (BY DEVELOPER)
AG DRAIN AND FLUSHER
RIDGE / CHANGE OF GRADE LINE
SURFACE CONTOUR MINOR
SURFACE CONTOUR MAJOR
EARTHWORKS GRADE
BATTER
FILL EXTENTS
ROCK BEACHING
PARKING BAY/PAVED AREA
STORMWATER PUMP STATION
RETARDATION BASIN & TREATMENT DETAILS
NOMINAL WATER LEVEL
EXTENDED DETENTION LEVEL
100YR STORAGE LEVEL
100YR STORAGE VOLUME (m³)
RETARDATION BASIN 1
SEDIMENTATION POND
BIORETENTION BASIN
111.10
31,276
CONNECTION TO BIORETENTION BASIN (3 MONTH ARI 6750 RCP DESIGN FLOW: Q3month = 0.17m³/s
100yr STORAGE LEVEL
ROCK SPILLWAY TO DIVERT FLOWS GREATER THAN 3 MONTH ARI TO RETARDATION BASIN DESIGN FLOW: Q1 - Q3month = 11m³/s
300mm THICK ROCKWORK IN BASE OF SEDIMENT BASIN TO 300mm ABOVE BED
INLET TO SEDIMENT POND (1YR ARI) 1050Ø RCP DESIGN FLOW: Q1 = 186m³/s
CONCRETE ACCESS TRACK
3000 BIORETENTION BASIN OUTLET PIPE
STORMWATER PUMP STATION
RETARDING BASIN OUTLET PIT
STORMWATER RISING MAIN
PUMP STATION INLET PIPE
BIORETENTION BASIN
BASIN 1
SED BASIN
1350Ø RCP (5YR FLOW)
HIGH FLOW INLET TO RETARDATION BASIN (1YR TO 5YR ARI) 2200 RCP DESIGN FLOW: Q5 - Q1 = 186m³/s
DIVERSION STRUCTURE
TREATMENT FLOWS (UP TO 1YR ARI) OUTLET TO SEDIMENTATION BASIN
HIGH FLOWS (1YR TO 5YR ARI) DIVERTED TO RETARDATION BASIN
PUBLIC OPEN SPACE 2.22Ha
SECTION A-A
NOT TO SCALE
BASIN RESERVE
100YR STORAGE
BIORETENTION BASIN
SEDIMENTATION BASIN
100YR STORAGE RL 111.10
DWL RL 108.00
BED RL 107.70
EDD RL 108.25
BED RL 107.95
EDD RL 108.59
NWL RL 108.00
BED RL 106.50
NORTH EAST GROWTH CORRIDOR
SHEPPARTON
FUNCTIONAL LAYOUT
RETARDATION BASIN 1
CITY OF GREATER SHEPPARTON
GREATER SHEPPARTON CITY COUNCIL
Dwg No
305578CD201
Rev

PRELIMINARY
Designed
Checked
Authorised
Date
Rev
Amendments
Approved
Date
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SCALE @ A1
spiire
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File name 305578CD200.dwg Layout name CD201 plotted by Anthony Scott
File location G:\305\305578\Civil\CAD plot date 02/07/2018 1:18 PM Sheet 1 of Sheets

CATCHMENT 1 BASIN COSTS

Item	Description	Quantity	Unit	Rate $	Amount $	Comments
	WORKS					
1	**SITEWORKS AND EARTHWORKS**					
1.1	Site preparation		Item			Refer to item 4.6.
1.2	Stripping of topsoil	20300	m2	$0.25	$5,075	
1.3	Basin excavation	56000	m3	$5.00	$280,000	
1.4	Sedimentation Pond and Bio Retention Excavation	1230	m3	$10	$12,300	
1.5	Final Trimming and Shaping	1	Item	$10,000	$10,000	
1.6	Topsoil replacement	20300	m2	$0.50	$10,150	
2	**DRAINAGE STRUCTURES**					
2.1	DRAINAGE PIPES					
2.1.1	300dia. RCP	50	LM	$150	$7,500	
2.1.2	675dia. RCP	11	LM	$290	$3,190	
2.1.3	1050dia. RCP	25	LM	$590	$14,750	
2.1.4	1200dia. RCP	15	LM	$650	$9,750	
2.2	DRAINAGE PITS					
2.2.1	Diversion Pit	1	No.	$20,000	$20,000	
2.2.2	600x600 Grated Junction Pit	1	No.	$2,000	$2,000	
2.2.3	900x900 Grated Junction Pit	2	No.	$2,500	$5,000	
2.3	HEADWALLS					
2.3.1	1050dia	1	No.	$6,000	$6,000	
2.3.2	1200dia	1	No.	$7,000	$7,000	
2.4	BIO RETENTION AREA					

2.4.1	150dia. slotted pipe including filter media 0.5m deep	600	m2	$90	$54,000	
2.4.2	Permeable liner	750	m2	$7	$5,250	
2.4.3	Fitting, risers, non-return valves, etc	1	item	$5,000	$5,000	
3	**MISCELLANEOUS**					
3.1	General Rock work (150dia.)	670	m2	$40	$26,800	
3.2	Sedimentation Pond Rockwork Base (300dia.)	330	m2	$90	$29,700	
3.3	Sedimentation Pond Clay Lining	860	m2	$10	$8,600	
3.4	Concrete Access Track	250	m2	$80	$20,000	
	SUB-TOTAL WORKS				$542,065	
4	**DELIVERY**					
4.1	Council Fees	3.25	%		$17,617	
4.2	Traffic Management	5.00	%		$27,103	
4.3	Environmental Management	0.50	%		$2,710	
4.4	Survey & Design	10.00	%		$54,207	
4.5	Supervision & Project Management	5.00	%		$27,103	
4.6	Site Establishment	2.50	%		$13,552	
4.7	Contingency	15.0	%		$81,310	
	SUB-TOTAL DELIVERY				$223,602	
5	**TOTAL ESTIMATED COST**				**$765,667**	

OUTFALL INFRASTRUCTURE COSTS – CATCHMENT 1

Item	Description	Quantity	Unit	Rate $	Amount $	Comments
	WORKS					
1	**PUMPSTATION WORKS AND RISING MAIN WORKS**					
1.1	Stormwater Pump Station	1	Item	$140,000	$140,000	
1.2	Pump Station Installation	1	Item	$50,000	$50,000	
1.3	Pump Station Electrical Supply	1	Item	$10,000	$10,000	
1.4	160dia. Rising Main (100%) *Including flow control cable*	250	LM	$100	$25,000	
1.6	250dia. Rising Main (40%) *Including flow control cable*	960 x 40%	LM	$140	$53,760	Part share with catchment 3.
1.7	Dispersion Pit for Outlet	0.5	Item	$10,000	$5,000	
1.8	Rock Beaching in Drain	0.5	item	$2500	$1,250	
1.9	Rising Main Fittings	1	item	$10,000	$10,000	
	SUB-TOTAL WORKS				$295,010	
2	**DELIVERY**					
2.1	Council Fees	3.25	%		$9,588	
2.2	Traffic Management	5.00	%		$14,751	
2.3	Environmental Management	0.50	%		$1,475	
2.4	Survey & Design	10.00	%		$29,501	
2.5	Supervision & Project Management	5.00	%		$14,751	
2.6	Site Establishment	2.50	%		$7,376	
2.7	Contingency	15.0	%		$44,252	
	SUB-TOTAL DELIVERY				$121,694	
3	**TOTAL ESTIMATED COST**				**$416,704**	

OUTFALL INFRASTRUCTURE COSTS – CATCHMENT 2

Item	Description	Quantity	Unit	Rate $	Amount $	Comments
	WORKS					
1	**PUMPSTATION WORKS AND RISING MAIN WORKS**					
1.1	Stormwater Pump Station	1	Item	$140,000	$140,000	
1.2	Pump Station Installation	1	Item	$50,000	$50,000	
1.3	Pump Station Electrical Supply	1	Item	$10,000	$10,000	
1.4	160dia. Rising Main (100%) *Including flow control cable*	600	LM	$100	$60,000	
1.5	Dispersion Pit for Outlet	0.5	Item	$10,000	$5,000	
1.6	Rock Beaching in Drain	0.5	item	$2500	$1,250	
1.7	Rising Main Fittings	1	item	$10,000	$10,000	
	SUB-TOTAL WORKS				$276,250	
2	**DELIVERY**					
2.1	Council Fees	3.25	%		$8,978	
2.2	Traffic Management	5.00	%		$13,813	
2.3	Environmental Management	0.50	%		$1,381	
2.4	Survey & Design	10.00	%		$27,625	
2.5	Supervision & Project Management	5.00	%		$13,813	
2.6	Site Establishment	2.50	%		$6,906	
2.7	Contingency	15.0	%		$41,438	
	SUB-TOTAL DELIVERY				$113,954	
3	**TOTAL ESTIMATED COST**				**$390,204**	

OUTFALL INFRASTRUCTURE COSTS – CATCHMENT 3

Item	Description	Quantity	Unit	Rate $	Amount $	Comments
	WORKS					
1	**PUMPSTATION WORKS AND RISING MAIN WORKS**					
1.1	Stormwater Pump Station	1	Item	$140,000	$140,000	
1.2	Pump Station Installation	1	Item	$50,000	$50,000	
1.3	Pump Station Electrical Supply	1	Item	$10,000	$10,000	
1.4	200dia. Rising Main (100%) *Including flow control cable*	890	LM	$120	$106,800	
1.5	250dia. Rising Main (60%) *Including flow control cable*	960 x 60%	LM	$140	$80,640	Part share with catchment 1.
1.6	Dispersion Pit for Outlet	0.5	Item	$10,000	$5,000	
1.7	Rock Beaching in Drain	0.5	item	$2500	$1,250	
1.8	Rising Main Fittings	1	item	$10,000	$10,000	
	SUB-TOTAL WORKS				$403,690	
2	**DELIVERY**					
2.1	Council Fees	3.25	%		$13,120	
2.2	Traffic Management	5.00	%		$20,185	
2.3	Environmental Management	0.50	%		$2,018	
2.4	Survey & Design	10.00	%		$40,369	
2.5	Supervision & Project Management	5.00	%		$20,185	
2.6	Site Establishment	2.50	%		$10,092	
2.7	Contingency	15.0	%		$60,554	
	SUB-TOTAL DELIVERY				$166,523	
3	**TOTAL ESTIMATED COST**				**$570,213**	

OUTFALL INFRASTRUCTURE COSTS – CATCHMENT 4

Item	Description	Quantity	Unit	Rate $	Amount $	Comments
	WORKS					
1	**PUMPSTATION WORKS AND RISING MAIN WORKS**					
1.1	Stormwater Pump Station	1	Item	$140,000	$140,000	
1.2	Pump Station Installation	1	Item	$50,000	$50,000	
1.3	Pump Station Electrical Supply	1	Item	$10,000	$10,000	
1.4	200dia. Rising Main (100%) *Including flow control cable*	310	LM	$120	$37,200	
1.5	Dispersion Pit for Outlet	0.5	Item	$10,000	$5,000	
1.6	Rock Beaching in Drain	0.5	item	$2500	$1,250	
1.7	Rising Main Fittings	1	item	$10,000	$10,000	
	SUB-TOTAL WORKS				$253,450	
2	**DELIVERY**					
2.1	Council Fees	3.25	%		$8,237	
2.2	Traffic Management	5.00	%		$12,673	
2.3	Environmental Management	0.50	%		$1,267	
2.4	Survey & Design	10.00	%		$25,346	
2.5	Supervision & Project Management	5.00	%		$12,673	
2.6	Site Establishment	2.50	%		$6,337	
2.7	Contingency	15.0	%		$38,019	
	SUB-TOTAL DELIVERY				$104,552	
3	**TOTAL ESTIMATED COST**				**$358,002**	


Victorian Planning Authority